

Identifying Continuing Opportunities for National Collaboration

National Digital Stewardship Alliance (NDSA) Opportunity Assessment Informing Document

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Research Team

Katherine Skinner, Ph.D.
Principal Investigator
Executive Director, Educopia Institute

Christina Drummond, M.I.S.T.P.
Lead Researcher, Project Manager
Associate Research Professor, University of North Texas

Consultants
Priscilla Caplan, M.L.S.
Christina Wasson, Ph.D.
Matt Cooper, M.B.A., M.S.

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FOREWORD

The question “what makes a network effective?” contextualizes the inquiry and research represented by this informing document. Study after study across a range of organizational management literatures (business, sociology, anthropology) shows a relatively (and perhaps deceptively) simple list of hallmarks of effective networks and organizations, including clarity, consistency and transparency in the following areas: mission, leadership, member relationships, funding, reward structure, productivity, delegation, and time allocation. Such organizational management literature also describes specific, identifiable stages of organizational development, and a range of governance decisions and structures that may be considered and applied to networks as they mature.

The realities of running any network or organization are, of course, contingent on changing environmental factors. Maintaining the health of a network and encouraging its further growth and development is an iterative process. It requires ongoing attention to the network support frameworks (governance, operations) and how these structures impact three key stakeholder groups: the network governance (including its administrators, leadership); its partners and member; and the community it serves (Provan and Milward 1995, Milward and Provan 2006, Akkerman and Torenvlied 2011).

Over the past two decades, studies have demonstrated that network performance is measurable according to a wide range of factors (e.g., efficiency, effectiveness, productivity, growth, stability, satisfaction). However, these studies have stressed that in order to interpret and plan according to these measures, such factors must be understood in relation to three key exogenous network characteristics: network governance, inception (mandatory versus voluntary), and network development stage (emergent coalition, transition to a federation, mature federation, or critical crossroad) (Kenis and Provan 2009).

No single “magic approach” or “perfect design” exists that can fit all networks at all moments in time. Nor are there characteristics—even ones seemingly straightforward, such as “member relationships” or “mission”—that can be evaluated without careful reference to the type of organizational framework deployed. For example, measures of “efficiency” differ radically for organizations bearing a shared governance model (not relevant) versus those utilizing a lead-organization governance model (highly relevant). Although there is no universal approach that networks can deploy, a range of well-documented, useful categories of network design and structure can be implemented to foster network development and maturation over an organization’s lifespan.

This context is important for clearly understanding the recommendations made in this informing document. The NDSA network is transitioning between two network development stages, maturing from a lightweight coalition of institutions responding to a common problem (digital resource continuity) toward a more formalized federation that has produced shared resources upon which the members now depend. With this change comes the opportunity to evaluate and refine its structure and activities. Herein, we document the NDSA’s current operations, its members’ understanding of and satisfaction with its work, and the gaps and opportunities that NDSA could address to great effect in this moment of organizational transition.

The Educopia Institute greatly appreciates the opportunity to conduct this research to identify opportunities to refine NDSA’s national focus and to foster and extend collaboration in sustainable ways.

Katherine Skinner, Ph.D.
Principal Investigator
Executive Director, Educopia Institute

EXECUTIVE SUMMARY

The National Digital Stewardship Alliance (NDSA) is a U.S.-based membership network that advances our national capacity to manage and preserve digital content. The network is designed to help stakeholders from the government, academic, public, non-profit, and commercial sectors to work together to mitigate the risks of digital loss. The NDSA is an initiative of the congressionally chartered National Digital Information Infrastructure and Preservation Program (NDIIPP) of the Library of Congress. It is administratively hosted by the Library of Congress, which serves as the Secretariat for the Alliance.

Founded in 2010, NDSA is now concluding its initial three-year charter period. At the request of the Library of Congress, the Educopia Institute conducted research to: 1) review the NDSA's progress to date and 2) identify opportunities to refine and extend NDSA's national impact. Using a mixed-methods strategy (encompassing both qualitative and quantitative data), the Educopia Research Team documented and analyzed NDSA leader and member perspectives regarding NDSA participation, expectations, motivations, and opportunities. We contextualized the findings through an organizational theory lens, explicitly seeking to better understand how the NDSA might improve its effectiveness as a maturing network organization.

Data collected by the research team affirms that the NDSA's story to date is one of early success. Fully 100% of surveyed members value the existence of a national alliance dedicated to digital stewardship. Members also cite the importance of the NDSA's relationship with the Library of Congress and the value that the Library of Congress's perceived national role provides to the NDSA by association. Our findings further demonstrate that the coalition has a mission that is relatively well understood by its membership. The data gathered in this project clearly demonstrates that the NDSA has cultivated a dedicated set of leaders, both within the Secretariat (Library of Congress) and within the membership (Coordinating Committee, Co-Chairs of the Working Groups) who facilitate the work of the organization. Members report high satisfaction with the relationships they are building across sector boundaries through their participation in the NDSA. They also report their interest in using NDSA Working Group findings and documentation to benefit their local institutions.

The findings also point to areas where NDSA can refine and strengthen its work. Members shared their confusion regarding the relationship between the Library of Congress, the NDIIPP program, and the NDSA, including misunderstandings regarding the Secretariat's role in the NDSA's work. Some also perceived communication challenges, noting opportunities to improve upon listserv correspondence, new-member orientation materials, the structure of Working Group calls and projects, and announcements of Working Group projects and products.

Our findings suggest that there are untapped reservoirs of knowledge and energy within the current membership. More than three-quarters of all Working Group members report that they spend less than 10 hours a month on NDSA activities, and more than half of these assess their level of participation as "too little"—indicating a strong base for future NDSA work.

By contextualizing the findings herein with network management theory, we surface multiple opportunities to strengthen the NDSA and improve its operational effectiveness. At the conclusion of this informing document, we recommend priority areas for near-term action, including simplifying, streamlining, and improving the visibility of NDSA contributors and achievements. A model 12-month Capacity Development Plan (expandable to three years if that is preferred) is included to outline small, manageable steps that can be taken by NDSA leadership to strengthen the operational structures undergirding the NDSA, while also aligning the NDSA's activities more closely with the recently produced 2014 *National Agenda*. Proposed lightweight adjustments aim to reduce the work burden on individuals (including Library of Congress staff), to increase the number of individuals meaningfully involved in NDSA activities, and to improve project efficiency.

Recommended priority areas for longer-term strategic planning address the evaluation, documentation, and reinforcement of the NDSA's organizational support structures. Such planning is aimed towards enabling the NDSA to better understand and plan for its administrative needs (current and projected), infrastructure (e.g., where and how are the activities and products of the NDSA facilitated and disseminated), and contingency plans (addressing various risk scenarios). These

longer-term activities inherently focus on increasing transparency and building trust—two key aspects of healthy network development.

As is discussed in the final recommendations section of this informing document, there is no “right” way to structure a network, only “right questions” that a network’s leadership and membership should ask at key moments in time. Organizations constantly morph and change according to the evolution of their own environments, cultures, constituents, and partners. Yet, successful networks develop practices that structurally anticipate, manage, and mitigate uncertainties and challenges—exactly as the NDSA is doing today.

2013 marks a critical transition for the NDSA; the alliance is maturing from an emergent coalition (a loose network of organizations incentivized to work together to address a shared problem or threat) toward a federation (marked by increased dependency and investment by members due to the value of shared resources created in the network). As the organization carries forward its objective of improving digital stewardship practices for our nation’s cultural, scientific, scholarly, and business heritage, it must increasingly attend to its own members’ needs—reinforcing that their work is necessary, valued, rewarded, and ultimately leading to the higher-level transformations that can only happen when individual organizations collaborate.

Going into its next three years, the NDSA is well poised to provide a stable locus for knowledge sharing and strategic alignment across the diverse sectors engaged in digital stewardship, preservation and archiving, to its members’ mutual benefit. By focusing attention now on the alliance’s governance, infrastructure, and member engagement, NDSA’s leadership will continue to strengthen this national endeavor.

SECTION 1: INTRODUCTION

Founded in 2010, the NDSA is a membership organization involving academic, government, library, archives, museum, commercial, and non-profit sectors. Its mission is “...to establish, maintain, and advance the capacity to preserve our nation's digital resources for the benefit of present and future generations.”¹ As the Secretariat for the organization, the Library of Congress provides the NDSA with program support, including an administrative home and limited staffing.² It also hosts an annual conference involving the NDSA and the extended digital preservation community in the United States.

Two groups have guided the Alliance during these formative years: the Library of Congress (most visibly by Martha Anderson, until her retirement in 2012) and the Coordinating Committee (elected by the membership). The primary mechanisms for proposing and undertaking initiatives in the NDSA are Working Groups (five total, each Co-Chaired by one Library of Congress representative and one member representative).

Mid-2012, the Educopia Institute was approached by Martha Anderson, the (now former) Director of the National Digital Information Infrastructure and Preservation Program (NDIIPP), to identify opportunities to strengthen the NDSA and capitalize on successes from its first three years of existence. The Educopia Institute proposed and was funded by a Cooperative Agreement to pursue this research as part of the Identifying Continuing Opportunities for National Collaboration (ICONC) project (September 2012-December 2013).

Between November 2012-July 2013, the ICONC project team conducted research into NDSA's structure, mission, practices, member perceptions, and relationships. We evaluated NDSA documentation, conducted two member surveys, held interviews with key players, and hosted seven focus groups with members and affiliated Library of Congress staff members.

This document presents our research aims, methods, findings, and an opportunities analysis. It is structured in five main sections, as follows:

- The **Introduction** provides a brief overview of the NDSA and this research project. It also explains the methodology governing data collection and analysis.
- The **Organizational Theory** section provides a review of leading theories regarding network management.
- The **Background** offers context for the findings, describing the history, structure, membership, activities, and accomplishments of the NDSA to date (2010-2013), as derived from documentation produced and published by the NDSA.
- The **Findings** from Surveys and Focus Groups provide the research team's data and analysis regarding the NDSA's current operations and member/leader perceptions.
- The **Recommendations** provide an analysis of short-term and long-term changes the NDSA might consider to improve its ability to achieve its mission and foster a national collaboration on digital stewardship. Opportunities for both small, incremental changes and deeper organizational transformations are explored.

A) METHODOLOGY

DATA SOURCES

This project employed a range of data collection methods, including reviews of documentation (organizational materials, NDSA listservs, NDIIPP/NDSA Digital Preservation conference registration lists), surveys (targeted online surveys of Program Contacts and Working Group Members), and focus groups comprising of both member and Library of Congress representatives. This section provides a brief overview of the scope, focus, and general responses for each. For survey instruments and focus group questions, please see Appendix Items C and D respectively.

¹ NDSA website, <http://www.digitalpreservation.gov/ndsa/> Last accessed 9/18/2013.

² *Principles of Collaboration*. Ratified 2011. Available: <http://www.digitalpreservation.gov/ndsa/documents/MembershipPacket201103.pdf?PHPSESSID=30387f341503bc4e3e6a12368e85b42c> Last accessed 9/18/2013.

1. DOCUMENTATION REVIEW

The project team evaluated a range of relevant documentation, both internal and external to the NDSA, including the NDSA website, materials from the 2010 Organizing Meeting, NDSA membership rosters, the *Principles of Collaboration* document, Working Group projects and documentation, NDIIPP/NDSA Digital Preservation conference registration and attendee lists, listserv correspondence, wikis, and the 2014 *National Agenda for Digital Stewardship*.

2. NDSA MEMBERSHIP SURVEYS

Two online surveys were developed by the ICONC project team and launched on the SurveyMonkey platform, one targeting the NDSA's Primary Contact at a member organization (i.e., the official NDSA program contact), and another targeting all participants in the NDSA's five core Working Groups (Outreach, Content, Infrastructure, Standards, and Innovation). Survey invitations were sent to email addresses provided to Educopia by the NDSA, and each invitee received an invitation to only one survey.³ Across the two surveys, 91 of 293 invited individuals responded, resulting in a sample size that can suggest trends, but cannot support statistical generalizations for the entire membership.

Open text and Likert scale questions were included in both surveys (see Appendices C, D, and E). According to inherent question logic, respondents were prompted with up to 32 questions (Program Contact) or 39 questions (Working Group). Within their email invitations to the survey, respondents were advised to budget 30 minutes to complete the survey, with the option to return over multiple browser sessions to complete the survey. Once the survey was completed, survey responses could not be revised. Instructions to respondents specified to mark "don't know" or "unsure" instead of seeking input from other staff.

The two surveys are briefly described in this section; results are analyzed in detail below (see Data Analysis).

A) PROGRAM CONTACT SURVEY

Questions within this survey were designed based on evidence that the Program Contact was likely to be a mid-to-senior level decision maker at the member organization, either in part or wholly responsible for the member organization's decision to participate in the NDSA. Questions unique to this Program Contact survey focused on the contact's perception of the NDSA's mission, value, and impact within the member organization. Questions shared with the Working Group survey were oriented towards participation, expectations, motivations, and perceived opportunities.

Just over a third of the invited NDSA program contacts, 52 of the 150, completed the survey. However, given the small population size of the program contact pool, this 35% response rate was not enough to definitively generalize responses across the NDSA's entire program contact population. Responding individuals represented diverse sectors (41% academic, 25% nonprofit, 20% government, 14% commercial). While just over half were affiliated with libraries and archives (55%), the balance of responses represented vendors (8%), research institutes/centers (8%), museums, consortiums, and professional associations (4% each), among others.

B) WORKING GROUP SURVEY

This survey's questions were developed to capture an individual's perspective on the NDSA (as opposed to an organization's), with a focus on the mechanics of NDSA Working Group operations.

Just over a quarter of Working Group participants (39 of the 143) responded to the survey. These individuals represented sector diversity similar to that reported above for the program contact survey responses, with one exception: the commercial sector was represented by a single respondent. Respondents affiliated with libraries and archives represented 64% of the sample. The resulting data illuminated trends and perceptions, although responses were again too few to generalize in a statistically meaningful way across all NDSA Working Group participants.

³ If an email address for a Program Contact was also listed on a Working Group listserv, the individual only received an invitation to the Program Contact survey and was omitted from the Working Group survey population.

3. FOCUS GROUPS

A series of semi-structured focus groups were held by the Project's Principal Investigator and Lead Researcher during the week of the NDIIPP's Digital Preservation 2013 meeting (July 22-24, 2013).⁴ These focus groups were designed after preliminary analysis of survey data was completed, and were intended to provide deeper data regarding some of the initial survey findings. Five pre-set questions were presented in chart form, with attendees responding in print or via sticker poll at the start of the session. A facilitator posed an additional 16 pre-set questions verbally on the following topics: participation, Working Group activities, and collaboration (See Appendix E). Unstructured conversations were allowed to continue from question prompts. Additional questions were asked given the nature of the conversation.

Independently, focus groups were held with both the membership and the organizational leadership.

A) NDSA MEMBERSHIP

Digital Preservation 2013 conference registrants were invited by email to participate in invitation-only, semi-structured 40-minute focus groups.⁵ Space was made available by the Secretariat to hold sector-based focus groups during the morning of July 22nd, just prior to the start of the conference. These time-slots yielded low turnout (of 117 invitees, only 12 individuals attended these July 22nd focus groups).⁶ An evening, invitation-only working session held the first day of the conference engaged four more individuals. An additional open-door focus group was included in the conference program for July 23rd and was announced in the plenary poster session for all conference attendees. This added session engaged an additional two attendees. Altogether, focus groups collected input from a total of 18 NDSA members.

B) NDSA LEADERSHIP

Each of the NDSA's Working Groups is headed by two Co-Chairs: one from the Library of Congress and one from a member institution. Following Digital Preservation 2013, a two-hour focus group was held with seven Library of Congress staff members who act (or have acted) as NDSA Working Group Co-Chairs. The then Acting Director and immediate past Acting Director of the Library of Congress' NDIIPP program were also present.

Two of the member-institution based Working Group Co-Chairs attended the NDSA membership focus groups described above. At the request of an NDSA member Co-Chair who was unable to attend the July focus groups, a separate focus group for the non-Library of Congress based Working Group Co-Chairs occurred in September 2013, engaging three additional perspectives.

DATA ANALYSIS

The ICONC research team employed quantitative, descriptive statistics as its primary toolset for survey data analysis due to the limited size of the survey respondent pool. Open-ended text was coded by the lead researcher and then verified by an anthropologist/ethnographer. Due to the low response rate and the relatively small size of respondent populations, inferential statistics were avoided. Qualitative data gathered through focus groups were included where appropriate.

⁴ <http://www.digitalpreservation.gov/meetings/ndiipp13.html>

⁵ If multiple representatives from an organization were registered to attend, only one representative was emailed an invitation to the focus group to avoid disproportionate organizational representation.

⁶ The July 22nd focus groups were hosted during an open time slot in which many of the Working Groups and the Coordinating Committee were meeting. This impacted the number of focus group attendees, as informally reported by many individuals in conversations throughout the conference. The low turnout may also have been compounded by the number of NDSA attendees who flew in the morning of the conference rather than the evening before.

SECTION 2: ORGANIZATIONAL THEORY

Organizational theory commonly identifies four key stages of network development: emergence of a coalition, transition to a federation, maturing federation, and critical crossroads, as first defined by D'Aunno and Zuckerman (1987). Briefly, emergence is marked by the recognition of an environmental threat or uncertainty that motivates organizations to share ideas and resources. Over time, successful coalitions increase in value to members, and the coalition transitions to a federation, where there is increased dependency and increased investment by partners due to shared resources. In the third stage, the federation matures, and member institutions demonstrate willingness to put the federation's interests first because of the significant investments they have made and benefits they have received. Finally, if the federation continues to motivate its membership, it reaches a critical crossroads where the increased pressures of centralization motivate some members to invest more, and others to withdraw in order to re-establish their own autonomy.

As any coalition matures into a federation, it must grapple with questions of leadership, resource allocations, and sustainability. And as a coalition produces more research findings and "products," upon which its membership increasingly relies (a marker of this maturation process), it must consider where and how to make these community resources visible and stable.

The NDSA is currently transitioning from one organizational stage to another: specifically, it is growing from an emerging coalition (nested within a strong parent institution) toward a federation (in which there is increased dependency and investment by members due to the value of shared resources created in the network). As NDSA matures along this organizational trajectory, one or more of the exogenous network characteristics that govern its activities may need to be evaluated and reworked to foster the NDSA's continued development and growth. As this document demonstrates, our research on the NDSA correlates closely with these broader organizational theory lessons. Many of the questions and decisions that organizational theory suggests are appropriate to consider at this stage of organizational developmental would be highly useful for NDSA at this time. These questions include:

1. Accountability. How does the NDSA assign responsibility for tasks, and how does it ensure parity throughout its membership (e.g., balanced resources and clear response to "free riders")?
2. Legitimacy. How does NDSA convince its wide range of cross-sector stakeholders (public and private organizations, memory institutions and software developers, etc.) that its work is important and relevant to their individual aims and successes?
3. Conflict. When differences of opinion arise, how are they resolved? In particular, what mechanisms are in place to ensure clear roles for network leaders, and how do those network leaders relate to and resolve conflicts with member organization leaders?
4. Governance. Does NDSA continue to operate primarily as a lead organization network (where the Library of Congress NDIIPP assumes primary responsibility for network management)? What is the role of the elected Coordinating Committee, and what level of commitment must members make to govern effectively? How does NDSA resolve the leadership tensions that arise when the lead organization's goals differ from the network's goals? Does NDSA need to explore other network designs, e.g., an *administrative organization* network, where member organizations create an administrative identity that is separate from, rather than a peer with, the membership organizations? What might be gained and/or lost in each design?
5. Commitment. Do the member organizations feel a sense of loyalty to NDSA? Are there ways to foster deeper connections between members, and also between members and the NDSA itself, in order to strengthen the alliance?

As we discuss throughout this document, the NDSA's current approach blends elements of the *lead organization* network with an *administrative organization* network governance model. The Library of Congress's National Digital Information Infrastructure and Preservation Program (NDIIPP) chose to implement this governance and administrative structure during the *emerging coalition* stage of network development. It has allowed NDIIPP staff members and participants alike to capitalize on the strong, cross-sector, national foundation laid between 2002 and 2009. It has also provided a strong core of NDSA staffing and administrative support through the Library of Congress for the first three-year membership period. Finally, it has marked NDSA as a clear continuation of NDIIPP's work to strengthen U.S. alignment around digital preservation.

This blended approach does come with certain costs, especially regarding the membership's perceptions of who is leading, staffing, and positioning the NDSA. The NDSA's membership clearly reported in both surveys and focus groups that it does not understand the NDSA-NDIIPP-Library of Congress relationships well, and some of the most notable membership misinterpretations—around staffing levels, funding, administrative support, positioning, and leadership practices—may be hindering the NDSA's growth and development.

As NDSA matures into a federation, and as NDSA members increasingly depend upon the resources built collaboratively within this network, we recommend that the relationship between the Library of Congress, NDIIPP, and NDSA be more explicitly documented and understood by all stakeholders. We also recommend that NDSA engage in contingency planning to ensure the sustainability of its own outputs, technical infrastructure, communications platforms, and outreach apparatus.

The NDSA's first three years as an emergent coalition have been tremendously successful, as demonstrated by its maturation process. The next three years will bring new challenges and new opportunities, particularly around structuring the organization and its workflows to best capitalize on the large-but-voluntary workforce represented within its more than 160 member institutions. There are many ways to accomplish this, and there is no single "correct" pathway forward. Networks and coalitions are not hierarchical, controlled environments; they are horizontal alliances built upon good will and common cause. The NDSA's longer-term success will depend on fostering a shared sense of purpose throughout the network's member organizations, and building trust in the structure and stability of the collaborative network.

SECTION 3: NDSA BACKGROUND

A) HISTORY AND STRUCTURE

Founded in 2010, NDSA is a member-based collaborative that encourages and bridges the nation's digital preservation efforts across sectors. Alliance members are organizations, including "United States government agencies, educational institutions, non-profit organizations and businesses with commitments and activities in the areas of collecting, preserving, or ensuring long-term access to digital content." All members are based in the U.S., though international organizations may join the NDSA as Affiliates. Membership terms run on a three-year basis and are renewable. There are no fees associated with membership. To join, an organization must apply and in its application demonstrate that it meets a set of established criteria and commit to contributing staff time to at least one NDSA Working Group.

The NDSA is led by a Coordinating Committee, comprised of up to nine member organization representatives who are elected by the membership to multi-year terms on a rolling basis (ensuring a mix of new and seasoned voices). The Coordinating Committee sets the direction for NDSA and produces strategic documentation reinforcing the goals of the network (e.g., the 2014 *National Agenda*). As no revenue is generated from NDSA activities, all of the administrative and technical apparatus supporting the work of the NDSA is provided on a voluntary basis.

The NDSA is facilitated by a Secretariat (Library of Congress NDIIPP) that contributes Secretary duties described in the *Principles of Collaboration*:

The Secretariat shall (a) act as secretary of all meetings of the Alliance and of such other committees and Working Groups as the Alliance shall specify, (b) keep the minutes thereof, and (c) coordinate the planning of annual meetings and other events (with a program committee). All minutes, reports, and other documents of the Alliance will be filed and maintained at the Library of Congress.

The work of the NDSA is largely undertaken in five Working Groups, each of which is co-chaired by a Library of Congress NDIIPP representative and a member representative. There is no formal, documented process by which new Co-Chairs are nominated or self-identify, and both Co-Chairs and participants serve on a volunteer basis for terms of (intentionally) unspecified length.

NDIIPP AND NDSA

The NDIIPP functions both as an anchor and a structuring agent for the young membership association.

NDIIPP was created in 2000, when Congress charged the Library of Congress with building a national network to increase stewardship capacity across sectors to preserve our collective digital history.⁷ NDIIPP was provided Congressional authorization for funding to plan and implement a national strategy for digital preservation. The NDIIPP designed a cooperative model based on public-private partnerships, and it implemented this model between 2003-2010, through the funding of collaborative digital preservation projects in a wide range of institutions, including libraries, museums, historical societies, government agencies, broadcasting groups, and commercial entities. These project teams functioned as a network of preservation partners. They demonstrated concretely the need for flexibility in technological approaches and the value of cross-sector engagement for meeting the high preservation demands of digital content.

As the federal allocation of funding ended in 2010, NDIIPP and its partners jointly sought a way to foster the continued growth of the national network. NDIIPP hosted an organizing meeting in 2010, at which the founding members and NDIIPP representatives agreed upon the structure and initial goals of a new membership organization, documenting these in the *Principles of Collaboration*. The founding members determined that the NDSA should accomplish its initial aims with volunteer labor and a lightweight facilitator (NDIIPP as Secretariat), thus mitigating against the need to generate ongoing revenue to support a 501(c)3. There, they also discussed the trajectory of NDSA's maturation.

The NDSA currently functions as an initiative of the Library of Congress, not a free-standing organization. As part of this arrangement, the NDIIPP staff contribute time and resources to facilitate the NDSA's work, including serving as Co-Chairs for Working Groups, planning and implementing the annual meeting, and providing the apparatus (administrative, technical, collaborative tools, etc.) that undergirds the NDSA's virtual operations. Notably, these NDIIPP efforts are voluntarily contributed and extend beyond the Secretariat duties initially described in the *Principles of Collaboration*. These

⁷ As related by Abby Smith in the article "Distributed Preservation in a National Context: NDIIPP at Mid-point" (*D-Lib Magazine*, June 2006), the original charge demanded that the Library of Congress create a plan that "should set forth a strategy for LC, in collaboration with other Federal and non-Federal entities, to identify a national network of libraries and other organizations with responsibilities for collecting digital materials that will provide access to and maintain those materials." <http://www.dlib.org/dlib/june06/smith/06smith.html> (Last accessed 9/18/2013).

include both staff time and the core administrative and technical infrastructure undergirding the network's communications and activities.

B) MISSION

Documented on the NDSA webpages and within the NDSA bylaws (included within the aforementioned *Principles of Collaboration*), the NDSA mission is as follows:

“The mission of the National Digital Stewardship Alliance is to establish, maintain, and advance the capacity to preserve our nation's digital resources for the benefit of present and future generations.”

This documentation also includes an action statement, values statement, and principles.⁸

C) MEMBERSHIP

NDSA membership has more than doubled since its 2010 launch, growing from 60 to 160 organizations (as of October 2013).⁹ Sectors currently represented in the membership base include education (34%), government (29%), nonprofit (26%), and commercial (11%). Multiple types of organizations participate today, ranging from public-access points to preserved material (e.g., museums, historical societies, public libraries, and a faith-based organization) to those engaged in digital preservation service provision, research and development (e.g., research institutes, commercial service providers, academic centers, labs and departments). Representing almost a third of the NDSA member base, libraries and/or archives (48 institutions) are today's most common member type. Consortia or federations (13 institutions) also exist as an identifiable cohort.

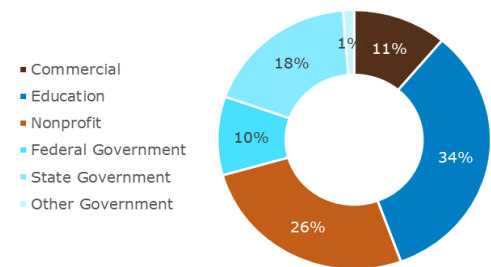


FIGURE 1: 2013 NDSA MEMBER DIVERSITY BY SECTOR

D) ACTIVITIES

The NDSA achieves its mission largely through member activities in two key areas, as described below: 1) information exchange and 2) Working Groups and Coordinating Committee activities.

INFORMATION EXCHANGE

The NDSA maintains several public-facing information resources that promote digital preservation practices. The NDSA web presence is a subsection of the NDIIPP's digitalpreservation.gov website. It includes basic NDSA operational information. It also documents the outputs produced by its membership and the NDSA Innovation Awards given annually to recognize digital preservation excellence. The web presence does not include any “members-only” space; it is open to the public. Other NDIIPP and Library of Congress resources, including the *Signal* (blog), often feature work by NDSA, though they are not officially NDSA activities.

The NDSA also hosts a range of “members-only” NDSA communications channels, all of which are currently managed by the NDIIPP. These have included an NDSA-ALL listserv used to share information with members about NDSA activities and to permit members to share information with each other about events and opportunities in the digital preservation arena;

⁸ See *Principles of Collaborations*, IBID.

⁹ According to a filtered version of the list maintained at the Library of Congress's “Partners” page, which focuses on all of the Library of Congress's partners in digital preservation (including NDSA, NDIIPP, FDGI, DPOE, and IIPC): <http://digitalpreservation.gov/partners/index.html>

individual listservs for the Coordinating Committee and each Working Group; an NDSA wiki; and an “Ideascale” space (used in the first year to solicit and vote on potential NDSA activities). The NDSA FAQ provides links to these non-public resources.

WORKING GROUPS

Upon joining, member institutions must commit to contributing volunteer effort to the NDSA by joining one or more Working Groups. The NDSA conducts much of its work through these five volunteer-based Working Groups (WG) and the election-based Coordinating Committee.

1. Content WG: Subdivided into six topic-oriented content teams as of June 2013, this Working Group focuses on disseminating guidelines and case studies related to the selection and assessment of content for preservation.^{10 11} Artifacts produced by the group include: case studies on community and hyper-local news, citizen journalism, and newspaper e-prints, as well as a survey report on web archiving activities, tools, and policies.
2. Standards and Practices WG: This group describes itself as advocating for the use of digital preservation standards, while identifying and disseminating best practices. Activities listed on the webpage include: “improving the representation of digital preservation topics on Wikipedia and surveying digital preservation institutions to identify staffing trends, benchmark programmatic offerings, and identify best practices.”¹² Artifacts produced by the group include the NDSA Digital Preservation Staffing Survey.
3. Infrastructure WG: Described online as working to “identify and share emerging practices around the development and maintenance of tools and systems...”, this group is researching practices around large-scale and cloud-based platforms for digital preservation. Artifacts produced by the group include the “Storage Survey”, and contributions to the intra-Working Group “Levels of Digital Preservation” recommendation matrix.¹³
4. Innovation WG: Described as focused on documenting and sharing emerging knowledge while guiding research and development with partners, this Working Group lists two examples of its efforts online: 1) developing a series of preservation oriented challenges, and 2) hosting guest presentations by experts outside of the NDSA.
5. Outreach WG: This group has two described objectives: 1) to engage individuals in the NDSA through awareness raising or direct recruiting, and 2) to create and disseminate informational resources on digital preservation. Utilizing action teams and campaign teams, this group has produced artifacts including a Kickstarter Curator page and the education-sector focused Digital Preservation in a Box.
6. Coordinating Committee: This committee provides leadership and direction for the organization. Up to nine elected representatives serve on the Coordinating Committee for rolling terms of no more than three years. The Coordinating Committee most recently produced the 2014 *National Agenda for Digital Stewardship* (issued July 2013).

Sector-based demographics for each group are shown in Appendix A.

¹⁰ Government, Geospatial, News, Media, and Journalism, Science, Mathematics, Technology and Medicine, Social Sciences, Cultural Heritage, Arts & Humanities

¹¹ http://www.digitalpreservation.gov/ndsa/working_groups/content.html

¹² http://www.digitalpreservation.gov/ndsa/working_groups/standards.html

¹³ <http://www.digitalpreservation.gov/ndsa/activities/levels.html>

SECTION 4: SURVEY AND FOCUS GROUP FINDINGS

A) NDSA HISTORY AND STRUCTURE

RELATIONSHIP TO THE LIBRARY OF CONGRESS

As described above, NDSA is an initiative of the NDIIPP program, and is administratively hosted by the Library of Congress. The role of the Library of Congress helps the NDSA leadership to engage members and partners, and helps members to obtain institutional buy-in for best practices.

Of our survey respondents, 78% reported that they valued or strongly valued their organization's affiliation with the Library of Congress through the NDSA. Members often voiced that they use the weight of the Library to increase adoption or recognition of the NDSA both within their own

Of our survey respondents, 78% reported that they valued or strongly valued their organization's affiliation with the Library of Congress through the NDSA.

organizations and among peer organizations. As one member stated, "we heavily leveraged the Library of Congress to make projects happen politically within my own organization." Another member shared a similar sentiment with respect to the posted resources online, "On the NDSA page, one might find the link to tools and resources, which points to a Library of Congress page - which isn't bad because it has authority." In focus groups, respondents consistently recognized the NDSA's dependence upon the Library of Congress, some stating that the value of the NDSA could disappear without the Library's support. Indeed, eight focus group attendees stated that the NDSA could cease to exist, or lack differentiation from other digital preservation organizations, should the Library of Congress no longer be perceived as leading the alliance.

While some NDSA members noted the importance of having a national locus for digital stewardship similar to other countries; many members perceive the Library of Congress as the organization filling this role. To quote a focus group participant, "in the U.S., we struggle a bit because we need some sort of national leadership within this domain, so we need an institution that can represent that. The Library of Congress stepped forward to play that role. Someone else could play that role, if they wanted to trade it off. But, it would be bad to not have that at all, as we'd have more *ad-hoc* activity not tied to a national vision."

RELATIONSHIP TO THE NDIIPP

The formal relationship between the NDSA and NDIIPP is not well understood by the membership at this time. In many conversations, members shared with this research team that they were unclear of the relationship between the NDIIPP and the NDSA. In some cases, members believed that NDIIPP had ended and transitioned into a Library of Congress program called the NDSA. Other members simply saw NDSA and NDIIPP as the same program with a new name, with the staff of the NDIIPP now staffing the NDSA. Newer NDSA members (non-former NDIIPP grantees) held this confusion or had heard of the NDIIPP and didn't know what it was. However, three focus group attendees who had participated in NDIIPP funded projects and had attended the 2010 planning meeting were still unclear on the relationship between NDIIPP and the NDSA. As one 'old-timer' stated, "it's hard to say what the relationship is; I've been involved for a few years and it isn't clear." The blurred boundaries accompanied member confusion about staffing and other resources provided by the Library of Congress in support of the initiative, as is discussed below in "Staffing". The structure of the NDSA's web presence (as a core mechanism for conveying information both to and beyond members about the NDSA) may help to occlude these relationships, as many of these components are "nested" (e.g., as of June 2013, the NDSA's membership list is only visible by visiting the Library of Congress's "Partners" page, and filtering a list of all Library of Congress digital preservation partners, including those in NDIIPP, Digital Preservation Outreach & Education (DPOE), Federal Agency Digitization Guidelines Initiative (FADGI), and the International Internet Preservation Consortium (IIPC), as well as the NDSA). Members

also expressed confusion regarding the hosting and purpose of the annual Digital Preservation conference, with many believing that this was explicitly an NDSA event.

OPERATIONAL CONSIDERATIONS

Although the relationship between the NDSA and the Library of Congress is clearly valued by the membership, in focus-groups and one-on-one meetings, both Library of Congress and External NDSA Co-Chairs reported that policies governing public-facing documentation stored on governmental websites have impacted the creation of NDSA branded resources (e.g., websites and technical tools) to support NDSA operations. Similarly, focus group respondents discussed complications related to branding products as NDSA products, with references to approval requirements at the Library of Congress.

As NDSA grows, NDSA-branded resources that support the operations of the Alliance and its members become more critical. The NDSA should begin working to minimize impediments to adoption of websites, technical tools, and other support mechanisms. The NDSA does not yet have a contingency plan to document its channels of response to emergency situations. As it enters its second charter period, we also recommend that NDSA prepare a contingency plan to enable this network to maintain continuity in a range of situations, akin to disaster preparedness. With a 160-institution membership base, it has multiple avenues to ensure that both communications mechanisms and produced artifacts are accessible throughout most imaginable events. By leveraging its members' infrastructures, documenting a range of emergency plans, and preparing NDSA leadership on the procedures, the NDSA can mitigate operational risks and ensure its own continuity.

Currently, documentation of the costs and budget model for the NDSA is unavailable to the non-NDIIPP leadership of the NDSA. Likewise, projected costs of running the NDSA without the Library of Congress serving as its lead organization are largely unknown. As the NDSA transitions from emergent coalition to federation, reopening this question of governance and structure and clearly documenting the budget realities of these two scenarios would help both the leadership and membership better understand the NDSA's operational realities. If a change were to be pursued by the community (e.g., the creation of a 501(c)3, the NDSA would need to ensure its ability to maintain the infrastructures appropriate to the organization's needs, including websites, wikis, listservs, and other key components. NDSA leadership would also need to seek funding for key operations (event hosting, staffing) as similar peer organizations do, as the NDIIPP program could no longer directly fund these activities. Creating a budget documenting the operational support required to maintain the NDSA would aid in the overall transparency of the organization. It would also allow NDSA's leadership and membership to make informed decisions about its network model as the network matures.

STAFFING OF SECRETARIAT FUNCTION AND LEADERSHIP POSITIONS

The administrative support provided by the NDIIPP program to the NDSA is neither well documented nor well understood by the at-large NDSA membership. Multiple focus group attendees and one-on-one conversations revealed that members held the misperception that the Library of Congress Co-Chairs were fully dedicated to and/or staffing the Working Groups. Their comments clearly communicated that the membership expected Library staff members to do the bulk of the NDSA's work. This same overreliance on the Secretariat for staffing showed up in comments about who is responsible for producing materials and products to support the mission of the NDSA. To paraphrase one individual, 'if they have so many paid staff on this, why do I need to do the work?' Non-NDIIPP NDSA leadership were in fact the single cohort within the focus groups that consistently indicated that they understood the NDIIPP staff's volunteer role in the NDSA.

Misperceptions regarding the limited Library of Congress' staff role in support of the NDSA could lead the Alliance membership to feel more stable, supported, and sustainable. However, our research has revealed that such ambiguity also may lead members to reduce their own volunteer efforts because they believe—erroneously—that someone is getting paid to do the work of the NDSA. Clarifying the amount of staffing available to the Alliance may help to increase engagement among passive individuals. This could also help Co-Chairs achieve their expressed goal for the Working Groups to take ownership and drive activities independent of the Library of Congress.

HISTORY AND STRUCTURE: RELATED OPPORTUNITIES

- Communicate clearly and consistently and in writing the relationship between the Library of Congress, the NDIIPP, and the NDSA.
- Make transparent the staffing contributions made by the Library of Congress to ensure that both the Membership and the Library of Congress understands the NDSA's staffing and support apparatus.
- Document the current NDSA budget, including in-kind support at the Library of Congress. Investigate operational models to support the costs of running the NDSA as an independent organization.
- Document contingency plans to maintain NDSA community operations.
- Evaluate the current blended governance model (Library of Congress as administrative host and organizational home, coupled with collaborative governance) against the NDSA community's aspirations, the *National Agenda*, and staffing and funding requirements to confirm that the existing model suits the NDSA's ambitions.

B) NDSA MISSION

Online, the NDSA describes its mission, "...to **establish, maintain, and advance the capacity to preserve** our nation's digital resources for the benefit of present and future generations." (Emphasis added) (National Digital Stewardship Alliance)

83% of Program Contact respondents perceived the NDSA's focus to be related to knowledge sharing and/or the fostering of community and collaborations.

Our data suggests that although NDSA members interpret the NDSA's mission in a number of ways, 83% of Program Contact respondents perceived the NDSA's focus to be related to knowledge sharing and/or the fostering of community and collaborations.¹⁴ The most common mission themes described by program contacts include:

- promoting or raising awareness of digital stewardship (38%),
- identifying and/or sharing knowledge and resources (34%),
- expanding and building community (32%), and
- fostering intra-community assistance and collaboration (30%).

Such activity-based descriptions fit well within the NDSA's stated mission, but the members notably perceive the mission in terms of membership benefit, not in terms of capacity building. The slight variance between the stated mission and the member perception may suggest that the members are less concerned with seeding capacity and more interested in what the NDSA as an organization can provide for them, i.e. knowledge, community, and resources. As the NDSA membership renews its affiliation, 2014 brings an opportunity to reassess the NDSA's mission. Evaluating explicitly the balance between NDSA as a capacity-building mechanism and the NDSA as a knowledge-sharing platform will aid in member expectations and participation in the coming three-year term.

CROSS-SECTOR ENGAGEMENT

Multiple individuals in focus groups and in open text within the survey noted that member diversity is a unique strength of the NDSA. Yet, others within the survey also saw the NDSA as serving a specific sector or community. Heritage institutions (2 responses), cultural institutions (1 response) and digital archives (2 responses) were referenced as focal points for the NDSA within the open-ended survey. One response noted an interest in supporting small institutions with limited budgets.

¹⁴ Across 47 Program Contact survey respondents, no predominant theme was apparent among the majority of descriptions of the NDSA's mission/purpose, however, this is modulated by the fact that responses were open text.

As of September 2013, the NDSA homepage included a general reference to “digital heritage”, stating that, “members collaborate to preserve access to our national **digital heritage**”. Members from different sectors may differ in how they interpret “digital heritage”, especially with respect to whom the NDSA serves. The homepage also stated that, “NDSA organizations have proven themselves committed to long term preservation of digital information. Our members include universities, consortia, professional societies, commercial businesses, professional associations, and government agencies at the federal, state, and local level.”¹⁵ This broader description of digital information suggests a focus well beyond cultural heritage organizations and those that serve them, to digital information stewards more broadly.

Intentionally emphasizing “cross-sector engagement” within the NDSA mission might aid in member outreach and partner engagement. If prospective members understand NDSA as an Alliance that intentionally positions itself as a nexus point between various memory sectors, rather than assuming it serves a narrow community (e.g., libraries), this may increase the types of communities that become involved.

MISSION COMPREHENSION: RELATED OPPORTUNITIES

- In membership communications, clarify consistently how membership activities and benefits support and advance the NDSA’s mission.
- Highlight to potential and current members the importance of cross-sector communications and activities.
- Review all web-based and publically available materials for language suggesting a heritage organization focus, adjusting language as needed to avoid the appearance of serving a specific sub-population unless such focus is expressly intentional.
- Use the organizational mission to explicitly frame and address the activities of the organization, as undertaken by the Working Groups
- Re-assess the NDSA’s mission with the now-established membership body as the NDSA consciously matures from an emerging coalition to a transitory federation.
- Define “digital heritage” for potential and current members, specifying inclusion of cross-sector collections.

C) NDSA MEMBERSHIP

MEASURES OF VALUES AND SATISFACTION

Unanimously, program contact respondents valued the existence of a national alliance dedicated to national stewardship. A slightly smaller population, 84%, reported that they valued their own organizational membership within the NDSA and only 64% perceived gaining organizational value from NDSA Working Group participation. Taken together, these data points suggest that while the general concept of a national alliance is universally valued across respondents, this value has not been fully actualized or realized by the NDSA in its initial three-year membership term. Member responses signal the NDSA’s opportunity and need to continue to strive to increase the value, or the perception of value, for organizational participation.

Unanimously, program contact respondents valued the existence of a national alliance dedicated to national stewardship.

Three-quarters (75%) of the program contacts surveyed indicated that their knowledge of digital stewardship best practices had increased or greatly increased as a result of their NDSA membership. Member institutions’ local development of new digital preservation ideas/tools/techniques (56%), and staff (53%) also were judged to have increased due to NDSA involvement. Some members reported that NDSA participation had impacted their own development of innovative local projects/practices (38%) and their own institutional projects (44%).

¹⁵ <http://www.digitalpreservation.gov/ndsa/index.html>

Members also clearly articulated the value of cross-sector collaborations in the NDSA. A majority of Program Contract respondents felt that the NDSA had a positive impact on both fostering collaboration between governmental, educational, nonprofit, and commercial entities generally (79%) and on fostering collaboration among “diverse communities” (77%). Yet, within their own organizations, only 44% of respondents reported that the NDSA had positively impacted their collaborations with like and unlike organizations.

Three-quarters (75%) of the program contacts surveyed indicated that their knowledge of digital stewardship best practices had increased or greatly increased as a result of their NDSA membership.

The first three years of collaborative work in the NDSA have clearly produced new cross-sector connections and projects. More than a third (39%) of surveyed program contacts indicated that NDSA membership had led to an increase of collaborations with organizations unlike their own. Almost half (43%) of the Working Group respondents agreed that their involvement in multi-institutional collaborations increased due to NDSA involvement, while only 17% reported that their involvement had not increased.

Survey responses revealed that a number of NDSA affiliated efforts have informed staff, decision-making, activities, and discussion at the local organizations (see Appendix B: Survey Respondent Usage of NDSA Outputs). Across Working Group and program contact respondents, the annual NDIIPP Digital Preservation meeting (which includes many NDSA members), the *NDSA Levels of Digital Preservation*, and the *Digital Stewardship Glossary* were reported as having informed a member’s own activities. Some Innovation and Content Working Group outputs were among those that were reported as unused as of yet by a majority of respondents. Notably, although most program contact respondents reported that they valued their institutions’ membership and participation in NDSA Working Groups, a large majority of program contacts indicated that they have not yet used or tried NDSA affiliated efforts/products.

The Working Group survey respondents’ professional satisfaction with Working Group efforts varied according to their primary Working Group. Fully 100% of Standards and Practices WG members surveyed were satisfied, and the Infrastructure WG ranked as the second most satisfied group (66%). The other groups had 50% or less of their respondents agreeing that the Working Group was professionally satisfying: Innovation (50%), Content (42%) and Outreach (40%). Respondents who indicated specifically that they were dissatisfied hailed from Outreach (1 response) and Content (2 responses).¹⁶ We will discuss these Working Group findings further in the “Activities” findings below.

¹⁶ It is interesting to note that the Standards Working Group is perhaps most directly aligned with the perceived NDSA mission around development and distribution of standards and best practices. Working groups affiliated with more removed organizational management or secretariat functions, like Outreach and Content, notably are among those with the lowest satisfaction ratings. Outreach, in particular, is structured around communications activities—an area in which preservation-oriented NDSA member representatives may lack training, knowledge, and expertise.

NETWORKING AND COMMUNITY ENGAGEMENT

Numerous mechanisms have allowed NDSA members to successfully associate beyond their own circles of influence. The majority (77%) of Working Group respondents agreed that their network of US-based digital preservation professionals had increased through their own NDSA involvement.

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WITHIN WORKING GROUPS

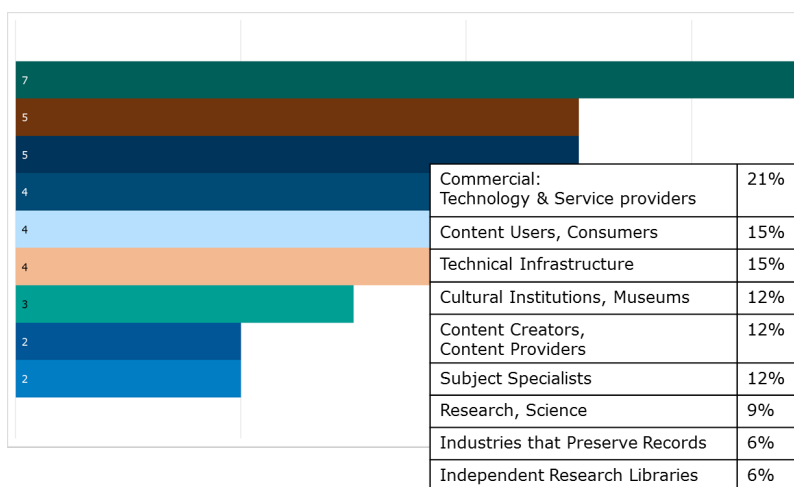
Working groups function as a key networking mechanism for the NDSA. Only 11% of the Working Group respondents knew “most of the Working Group members” upon joining their group, with the remaining 89% of respondents split nearly evenly between knowing “some” (30.5%), “hardly any” (28%), or “none” (30.5%) of their Working Group colleagues upon joining. This data represents fulfillment of the NDSA’s objective of relationship building between digital stewards at a national level. It also illustrates the important functional role of Working Groups as networking hubs, where members can get to know and collaborate with a broad range of digital stewardship players. The limiting factor is merely one of member initiative – as one Co-Chair stated, “members get out of the groups what they put in.”

The NDSA also invites a diverse range of experts from outside of the membership to participate in both the annual meeting and the Working Groups. Such non-members have spoken at the annual meeting, or have presented to the Innovation Working Group. On an *ad-hoc* basis, these individuals are invited by the Secretariat to join Working Groups as informal observers, either on conference calls or the listservs. Library of Congress Co-Chairs indicated that these individuals are not always invited to join the NDSA as members, reasoning that sometimes it is not always appropriate given the individual’s core interest area. This represents another valuable cross-sector exposure and relationship-building opportunity facilitated by the NDSA.

WITHIN A DEEPER SECTOR BASE

Even with these existing networking mechanisms, survey data indicated multiple opportunities and member desires to expand the NDSA to incorporate additional voices. Just over half of Working Group respondents (58%) agreed that the diversity of expertise in their Working Group is ideal. Across program contacts and Working Group respondents, 46% indicated that they felt specific “entities/communities/voices” were missing from NDSA conversations (See Figure 2.) Program contact respondents from nonprofit and commercial sectors (which are the smallest representative communities in the NDSA at 26% and 11%, respectively) were more likely to agree that perspectives were missing, as compared to their academic and

FIGURE 2: SPECIFIC VOICES NOTED AS MISSING FROM NDSA CONVERSATIONS BY COUNT OF WORKING GROUP AND PROGRAM CONTACT RESPONSES



government sector based counterparts. The most frequently listed missing perspective was that of commercial technology and service providers, followed closely by preserved content users/consumers and technical infrastructure providers. Of survey respondents, 73% supported increased formal collaborations with other digital stewardship initiatives. Multiple focus group participants saw an opportunity for the NDSA to strategically engage industry. As one member explained,

It would be great to bring in platform (developers) that a large number of users in a sector rely on for content creation, such as Drupal given its use in government and nonprofit sectors. Or Mozilla. These groups you need to collaborate with on different layers, not just the technical. Currently the Library of Congress brings them in at a point in time for something like a keynote, but it would be great to have a more long-term, working relationship. For example, a partner could donate consulting time to work with the community to ensure that their tool is preservation capable.

Another member in a separate group indicated that a larger project workforce could result from leveraging strategic partnerships with corporate partners, “We need more strategic alliances or partner affiliations so there isn’t just an expectation that the Working Groups do everything. This could be part of a larger picture, to get industry excited about participating in the national strategy.” Relationship management between non-profit and for-profit members is likely to require additional attention to ensure optimal functioning of the NDSA’s cross-sector efforts. Within survey comments, a few individuals noted an open-source orientation within the NDSA. In the focus groups, a few academic members indicated strong distrust of the motives of corporate entities working in the digital arena. Such perceptions signal an opportunity for the NDSA leadership to proactively facilitate collaborations between such communities, addressing potentially serious “culture clash” cross-sector issues as needed.

Focus group participants expressed a related interest in sharing NDSA information more broadly in order to reach other membership organizations both within and beyond the digital stewardship community. Membership diversity surfaced as an NDSA strength, with widespread representation across sectors, types of organizations, and interest communities. Upon analyzing the nature of memberships held by Working Group respondents, it became clear that such diversity holds multiple opportunities for the Alliance going forward.

WITHIN OTHER ORGANIZATIONS IN THE DIGITAL PRESERVATION LANDSCAPE

NDSA’s Working Group participants participate in multiple professional organizations beyond the alliance. Working group survey respondents were asked to share information about other organizations they “personally participate in to inform long-term digital efforts (including preservation, curation, and/or archiving).” Network analysis of the resulting co-membership data clearly illustrates a common core of organizations where members are likely to see and work with each other (See Figure 3).

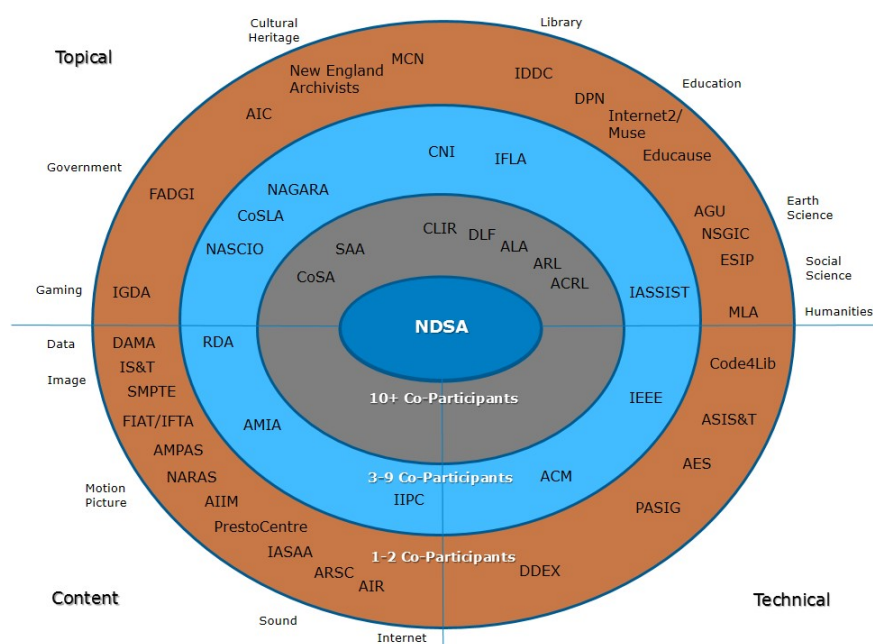


FIGURE 3: ORGANIZATIONAL CO-PARTICIPATION BY COUNT OF NDSA MEMBERS

On average, Working Group respondents reported participating in three other organizations to inform their digital stewardship efforts. Analysis of co-membership frequency across this sample illustrated that NDSA members were most commonly also members of SAA, CNI, ALA, DLF, ARL, ACRL, or CLIR (See Figure 3). This information points to an opportunity for the NDSA to strategically partner with such organizations that focus on preservation or archiving within their own missions. Effective coordination of events and initiatives could benefit the common memberships by reducing duplication of effort across organizations and by maximizing the impact of scarce member resources like time and travel funding.

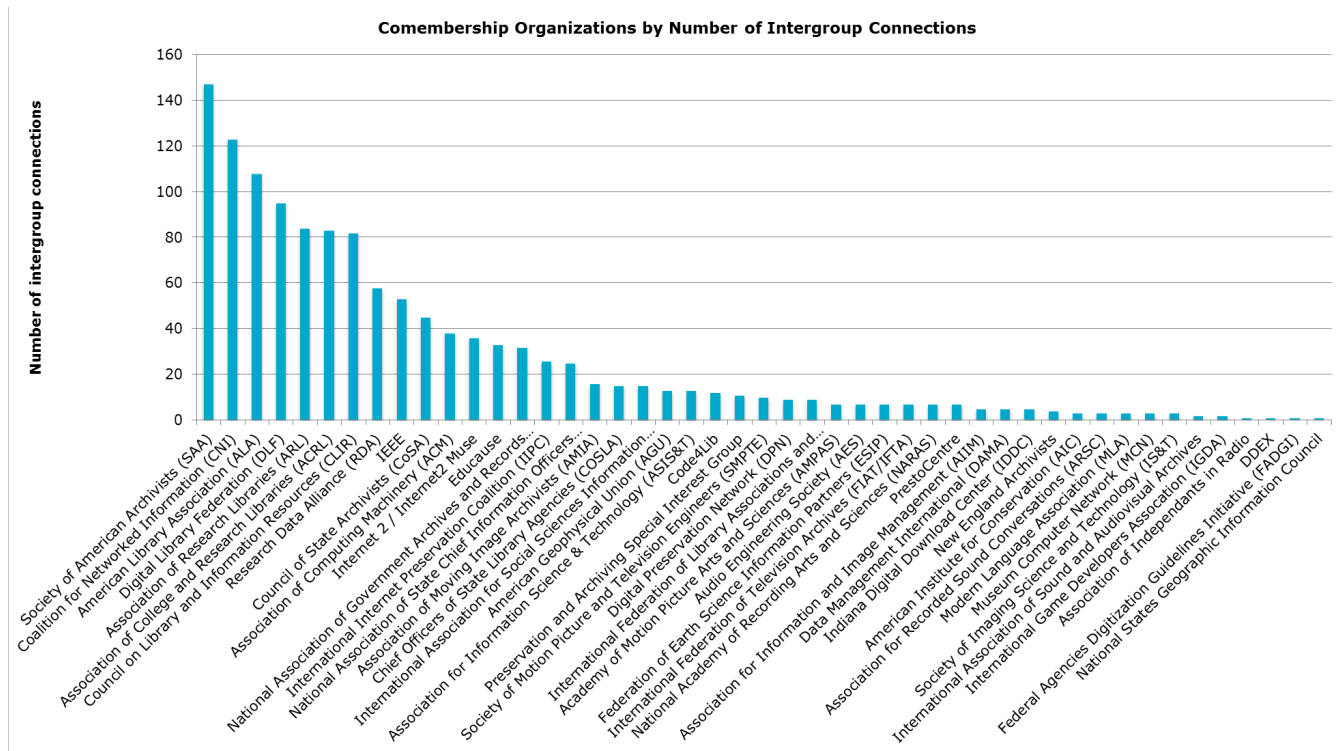


FIGURE 4: NDSA WORKING GROUP RESPONDANTS CO-MEMBERSHIP BY INTERGROUP CONNECTIONS

As Figure 4 illustrates, there is likely a “long-tail” of professional networks within the digital stewardship landscape. These organizations surfacing within the survey sample extend beyond “digital preservation” oriented organizations, into specific topical, content-oriented, or technical arenas. Co-participation analysis of the survey data showed that 7 core organizations had over 10 NDSA members co-participating; 11 organizations had 3-9 co-participants. However, 29 organizations conceptually were connected to the NDSA through co-participation of only 1-2 respondents (Figure 3) For this segment of organizations, a potentially perilous link exists back to the Alliance, sometime represented by a single NDSA member.

The ability of the NDSA to bring together representatives from such a diverse array of organizations is a key strength of the organization, as was voiced by multiple individuals in both focus groups and the surveys. The NDSA has an opportunity to leverage the community connections presented by its membership, positioning individuals from the NDSA community as potential champions for digital stewardship in a range of industries.

In multiple focus groups, members indicated that if they had a more formalized way to reach out and engage specific content communities, they would do so. Some members mentioned a desire to have access to prepared outreach materials tailored for specific communities (e.g., performing arts and photography). Two models surfaced to increase NDSA presence

in communities where digital stewardship is a peripheral but relevant concern. Notably, both of these models are being implemented to some degree within and by the Outreach Working Group, though focus group participants did not acknowledge or seem to be aware of that work.

1. NDSA Road Shows

As one member explained, “Individually, we all know about what happens in other organizations like SAA; but, those memberships don’t know about what’s happening at the NDSA. People don’t know that the NDSA is a place where activities happen and things can get going.” Within a focus group, a model was suggested to co-locate an NDSA-hosted presentation or digital stewardship issues briefing at other digital stewardship events (e.g., DLF Forum, SAA Meeting, RDA meeting.) As an example, such a co-location model has been used for over 30 years by the Internet Society to share policy-oriented presentations with the engineering based standards community present at regular IETF meetings.¹⁷

2. Member-based NDSA Representation

Members could actively represent the NDSA at a poster session or table at events in their own professional domains. Targeted materials for a given community could be packaged and made available to NDSA members to take to such an event. For example, the NDSA *Levels* and/or the 2014 *National Agenda for Digital Stewardship* materials could be coupled with a short, community-specific white paper to provide community-specific context.¹⁸ Such public outreach activities would expose a broader set of organizations to NDSA informational products and membership information, furthering the NDSA’s mission and the *National Agenda*. These activities do not need a large budget, especially as NDSA members already are registered and funded to attend such conferences – often wearing multiple hats. Regional and co-location strategies for event placement would minimize additional travel costs to reach new community-based audiences. In cases where such outreach activities would require financial commitment (e.g., to host a table), the NDSA leadership could consider negotiating reciprocal outreach opportunities, where the NDSA receives tables for free and in exchange, the other organization is offered free exhibition/poster access at the Digital Preservation meeting.

Within the focus groups, individuals noted their desire to know more about the activities of other organizations, both within and across communities. Two noted that inter-organizational exchange helped their Working Groups to avoid a near-duplicative effort, while another shared that such duplication was discovered only *after* a month of work had been invested

“Individually, we all know about what happens in other organizations like SAA; but, those memberships don’t know about what’s happening at the NDSA. People don’t know that the NDSA is a place where activities happen and things can get going.”

in one NDSA initiative. To avoid future duplication, either between Working Group efforts or between the NDSA and other organizations, some participants suggested that the NDSA compile a publically accessible project clearinghouse (on the broad side) or NDSA initiative directory (on the lighter side) to facilitate the identification of active initiatives or potential project partners. Participants shared that already, good ideas surface and projects begin, only for a project group to discover a similar project underway elsewhere (even in another Working Group, as described in two of the above stories). While the Wikipedia entry for the NDSA was mentioned as a starting point, members voiced a need for something similar to

¹⁷ See Internet Society website for more information: <http://www.internetsociety.org/what-we-do/internet-technology-matters/open-internet-standards/briefing-panels>

¹⁸ Such community-specific introductory framing projects make for small, tangible opportunities to develop working partnerships with other membership organizations. The projects may also be potentially attractive to private foundations within the specific community spaces.

StackExchange¹⁹ or SourceForge, where the digital preservation community could quickly identify active projects and help direct engagement.²⁰ Two members also noted that given the wealth of international activities in the digital preservation space, it would be helpful for the NDSA to both advertise and acknowledge other initiatives in a global framework, making key similarities and differences apparent.

ORIENTATION PROCESS

Integration into the NDSA should be easy and straightforward for new members. Yet many new members voiced a lack of clarity around how to engage. Focus group respondents from newer (especially non-NDIIPP legacy) institutions indicated that NDSA orientation was confusing and had hindered their initial participation. As one new member stated, “I’m new enough, so that I don’t know how to begin or start at all. There’s no, ‘here’s how to begin’.” Some were unsure of what Working Groups to join, or even how to join a group. They requested a formal orientation process that would begin as they completed their membership application, with direct outreach from NDSA to their institution. One member noted that although the information was likely out there, setting aside the time to investigate the process was not easy.

As of September 2013, an opportunity exists to compile the material currently in the “FAQ” section of the NDSA website to create standard orientation materials that can be sent to members and maintained by the membership.²¹ Such an approach could eliminate comments such as, “I don’t know how to get into a Working Group, or which to join; I just joined within the last month, and haven’t yet had a conversation with anyone.” As the pace of new members joining the Alliance slows in the second three-year term, the NDSA might also produce a mentor/mentee opportunity to enable active NDSA members to initiate new members, channeling their energy rather than allowing them to drift into passive roles within the community.

A few members also were unsure of the active initiatives in each Working Group, and therefore were hesitant to select a group, or volunteer themselves on projects.²² As one explained, “I need to research to find the best avenue to fitting into current initiatives, which itself requires some of my very limited time.” Another new member was awaiting an assignment, “Case studies were interesting, but we’re waiting for a call to action on what we can do.” While Co-Chairs report that they currently nudge or nominate members they know during calls, NDSA could employ additional methods to make transparent both ongoing and prospective activities, particularly for both potential and new members.

MEMBERSHIP: RELATED OPPORTUNITIES

- Publish a list of benefits derived from organizational membership; for both members and prospective members. Include testimonies regarding concrete benefits from strong leaders in the community.
- Make ongoing Working Group activities more visible for current and prospective members, across Working Groups, and out to related membership organizations.
- Continue to advertise Working Group outcomes broadly on multiple platforms to increase awareness of NDSA accomplishments both within and beyond the membership: through *Signal* posts, NDIIPP Annual Meeting “reveal” sessions, webinars, centralized – public-facing websites, and outward through community-based venues.
- Refine publically available ‘on-boarding’ information to clarify how the NDSA Working Groups function, providing information on: i) active Working Group initiatives, ii) how to join a Working Group, iii) how to propose an

¹⁹ Notably, the NDSA was involved in the first, now defunct digital preservation “StackExchange”. NDSA members are also involved with its revival in Fall 2013.

²⁰ Potential models or informational sources to start from include Paul Wheatley’s COPTR Combined Registry effort and the ICONC research project’s state-by-state collaborative digital preservation activity documentation.

²¹ After the sharing of a preliminary version of this report with NDIIPP staff in September 2013, the NDSA membership webpage was updated to address many of the issues outlined in this text. As of October 18th, 2013 the NDSA website has been updated to outline membership benefits, clarify membership eligibility, provide orientation information and ways for interested individuals to become involved. Such changes make great strides towards addressing issues raised in this report.

²² New web content added to the NDSA website after September 2013 begins to address this.

initiative, iv) how to recruit interested collaborators to an initiative, and v) how to share information about existing efforts.

- Proposed NDSA work would benefit from broader announcements that extend beyond the individual Working Group calls where they may first be suggested. Explore new structures and mechanisms for i) actively engaging members across NDSA Working Groups and ii) engaging representatives from targeted satellite communities. If NDSA continues to use IdeaShare, raise awareness of the platform among the existing NDSA membership so that the community recognizes it as the place to find active initiatives.
- Increase the visibility of the NDSA in communities with shared membership or shared concerns via road shows and/or member presentations within their own communities.
- Foster a directory effort for NDSA members to share information about both individual projects and Working Group initiatives to promote collaboration and to decrease duplication.
- Facilitate dialog on “hot topics” between specific cross-sector groups, e.g., commercial and noncommercial entities, perhaps as quarterly or biannual roundtable conversations, or as a replacement for a regular call for multiple Working Groups.

D) NDSA ACTIVITIES

NDSA members participate in the NDSA in a number of ways. They may participate by attending the annual Digital Preservation conference, by listening to conference calls, or by monitoring listserv email as time permits. Heavily engaged members contribute through leadership service and by undertaking project and/or content development. This section describes levels of member engagement indicated by survey data and provides focus group comments on the modes of engagement used to date.

INFORMATION EXCHANGE

Emails reportedly were the most frequent method of NDSA communication. Library of Congress Co-Chairs indicated that the listserv is used sparingly by the Secretariat, the Co-Chairs, and the membership. Focus group attendees disagreed with this assessment. A member representative who had joined a month prior to the focus group stated, “I see a lot of emails, it has almost gotten to a point of if I see NDSA, I hit ‘Delete’. They’re so frequent and so many of them don’t seem especially relevant.” Another member at the group chimed in, “There are a lot of emails; (the prior comment) is fair. I have digest reading time, not just for NDSA but for other forums, so I get to it once or twice a week. I scan through to see if I’m missing actions or meetings and to prepare for the next phone call. I skim looking for actionable things.” A few focus group representatives further reported that time spent digesting and managing NDSA email traffic is time they would prefer to spend on actively contributing to NDSA initiatives.

For most members, there appears to be a low, perhaps manageable, workload resulting from their NDSA engagement.

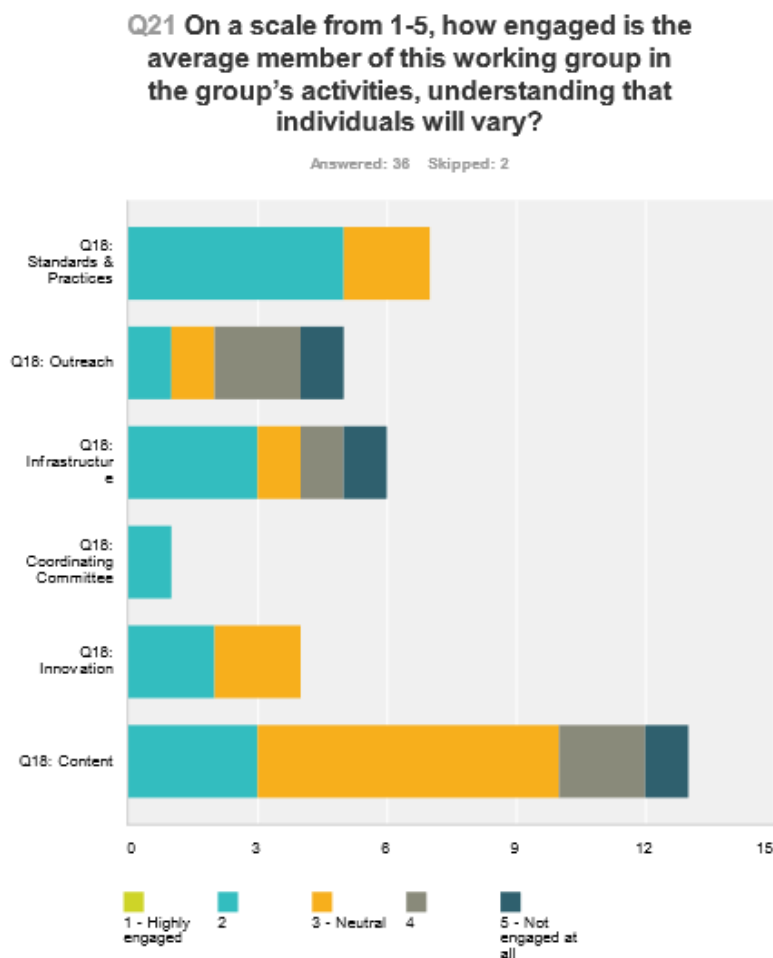
Yet, alongside their complaints regarding the level of current email traffic, members noted difficulties keeping up with what other Working Groups are doing. As one focus group participant explained, “Early on there was more attention paid to communicating across groups. Now, there’s a flurry of stuff coming at you from multiple directions. You’re getting email from one NDSA group and have to keep it straight from another. It could be done in a single email to NDSA-ALL.” A second participant in the group echoed this feeling, adding that, “if there is no news, it’s ok to say ‘we have no news’. You don’t have to fill up time.” A member from a small organization simply felt that the sheer volume and technical nature was more than they needed, “The listservs provide a lot of information, but it is technical. Too technical for what we need.” An opportunity exists for the NDSA to consider a standardized format for its member communications, consolidating and thereby reducing the quantity of emails where possible.

The member perception of “too many, too often” conflicted with the perception of the LC Co-Chairs focus group that the listservs are used sparingly and are only lightly trafficked. Some members are signed up for multiple working groups, which could be a cause of this discrepancy. Improving the predictability of correspondence (e.g., regular, digest-form emails with clear, regular content) may help to remedy this member perception; likewise, articulating to members with multiple working group affiliations that they will be receiving mail from listservs associated with each of their working groups may help reset these individuals’ expectations.

WORKING GROUPS

Survey data reflected an expected variance in the amount of time individuals contribute to Working Groups. For most members, there appears to be a low, perhaps manageable, workload resulting from their NDSA engagement. Yet, a small proportion of the membership appears to put in the bulk of the effort on projects, while a sizable cohort passively observes, without contributing time to projects.

Across primary contact and Working Group respondents, 85% estimated that they spent 10-or-less hours per month on NDSA activities. Just over half (56%) of program contacts assessed this level of participation as “too little”; 41% indicated that it was “about right.” This may indicate that some program contacts may feel their organizations are underutilized or unable to provide as much time as they would like.



The 39 Working Group respondents (WG Survey) reported that they spent an average of four hours in the prior month on Working Group activities, inclusive of time in meetings, on email, on projects, etc. Among these respondents 18% reported doing nothing during the month, while 15% reported contributing 10 or more hours.

Looking at project-based work over the past year, 46% of Working Group respondents reported contributing 20 or more hours to project efforts. Nearly a quarter (nine of the 39) of respondents reported no effort on projects, while three reported contributing 100 hours or more.

Peer-level ratings of the average Working Group member’s engagement demonstrate that fellow members notice the passive engagement among their peers. Across all Working Groups, only 41% saw the average member as engaged while over 20% saw their average Working Group member as disengaged. Those who rated the average member as disengaged were primarily members of the Outreach, Infrastructure, or

Content Working Groups. Such perceptions are a warning sign, and should be closely tracked to avoid a cultural norm where the Working Groups are generally perceived to be passive and disengaged. They also reflect an opportunity to

examine potential reasons behind passive engagement, such as: member attrition, misplacement (i.e. member is on the wrong group for their interests/background), an expectation of passive engagement, a lack of known tasks, or dissatisfaction.

WORKING GROUP PARTICIPATION FORMATS

Conference calls were reported to be the most common mode of Working Group participation. However both survey data and focus group data suggested that most individuals perceive these calls to be a passive, information sharing experiences. To quote one Co-Chair, “We may have 100 on the Working Group list, only 10-15 on the call, and only four are verbally active.”

The regular Working Group conference calls appear to be primarily a communicate-out vehicle. Members shared with this Project Team multiple ideas for regular call improvement. One suggestion focused on the need to run tighter, more action or discussion oriented meetings to maximize the contribution from those taking the time to

“We have about 100 on the Working Group list, only 10-15 on the call, and only four are verbally active.”

join the call. To quote a member, “It’s easy to miss a meeting that doesn’t have a crisp agenda and set of discussion topics. If it’s just ‘let’s get together to talk about something’, it’s easy to miss. Short, edible bites really works these days, to mark your time. In this period of time we’re going to do something and get something done. Meeting for meeting’s sake? Well, everyone’s really busy.” An individual from industry mentioned that, “In general, what brings people to meetings and what delivers results is to have three objectives for a meeting and check those off. This is what we’re going to cover. Topics that come up that aren’t on the agenda you can put in parking lots and off to the side to say we will process these as they are important, but not for today.”

The calls were also referenced as the primary mechanism for raising new project ideas, with the listserv as a secondary means for doing so. Focus group attendees noted that with so few WG members attending calls on a regular basis, those who raise ideas face challenges when trying to get initiatives off the ground. Those with the requisite time or skills to volunteer simply may miss the call and not have the time to read the call notes. As one member put it, “There are untapped people who might be asked to do things, but it can’t just be ‘call in to listen once a month’.”

Another member pointed to the lack of personal connections between Working Group members as a potential barrier to

...they listen and absorb. But, if you let that go on too long, you create the dynamic of having a group of “do-ers” and a group of listeners who collect information and bring it back, but who don’t engage at a deeper level.”

new members joining collaborations, or even participating on the calls. As one new member mentioned in a focus group, “I find it difficult because there are so many people on the call.” A more seasoned member of the NDSA suggested that new members do not have the social connections or requisite NDSA knowledge to engage, “You need someone who can individually reach out to members and help them identify ways they can have an impact. What happens when you have an influx of people who

don’t know other people well is they get stuck. They think, ‘so there are all these people who know all of this who have been together since day one, and have worked collaboratively, and I have to figure out how to integrate’. So then they listen and absorb. But, if you let that go on too long, you create the dynamic of having a group of “do-ers” and a group of listeners who collect information and bring it back, but who don’t engage at a deeper level.”

WORKING GROUP OPERATIONS

With the exception of one individual, all Working Group respondents rated their Working Group environments as collegial. When describing what works well in the group, responses indicated leadership (35%), and discussion, idea sharing, and brainstorming (30%). A majority (78%) agreed that decisions in the group were made in a satisfactory manner. Yet, focus groups and survey data surfaced opportunities for the Co-Chairs.

1. Alignment with Working Group goals

Only 65% of Working Group member respondents agreed that the group was working on the most important issues relevant to the charge of the Working Group. A third (32%) were unsure if they were, which indicates these members were either unclear of the charge itself, or the connection between their activities and the charge of the group. Two members suggested in the survey that Working Groups could be improved through the clarification of each group's charge or goals. Notably, four of the 12 respondents from the Content Working Group indicated that participants in the Working Group did not have a shared understanding of the Working Group's goals and tasks. There may be ambiguity around other groups' charges, as marked by the Outreach Working Group, where three of the five respondents were either neutral or unsure.

Three individuals in the focus groups noted an opportunity for the NDSA to use the *National Agenda* as a way to focus and strategically align Working Group efforts with the NDSA's future directions. As one member stated, Working Groups needed to "provide focus so that we're making headway and not spinning our wheels." Another member elaborated, "I'm wondering if focusing the work of the committees [sp] or aligning it with what we said is the *National Agenda*, might result in more focused activity and might also be a way of focusing how we engage with people." The NDSA has an opportunity to develop its own *National Agenda* implementation plan with its leadership, so that its own membership understands how their individual contributions combine to move the nation forward.

2. Idea / team formation

Multiple members and Co-Chairs stated that it is "easy" for someone to suggest a new project idea; a member introduces it on a call, then, follows up with interested parties outside of the call. Co-chairs seem to be fully supporting member-initiated ideas, although more than Co-Chair noted that ideas are not suggested that often. To quote one Co-Chair, "As a Co-Chair, I love it when someone else says, 'hey, I have an idea, let's do this'. (I say) Yeah - go for it! If someone wants to start a project, we're 100% behind it."

...it is "easy" for someone to suggest a new project idea; a member introduces it on a call, then, follows up with interested parties outside of the call.

Unanimously, the newer NDSA members represented in the focus groups were unfamiliar with this process, and stated that they were learning about the process in the focus group itself. This points to an opportunity for the NDSA to improve its new-member welcoming/orientation process. Whether through standard emails with this information that are pushed out to new members, or a publically available website accessible to all members, the basics of who, what, why, and how can be easily shared with new members so that they can jump in and contribute before becoming habitually passive.^{23 24}

Seasoned members noted that the challenge was not raising an idea, but rather forming a team to assist with the project. Per one member, "It's fairly easy to start a project or propose an idea, what's a little more difficult is

²³ Two Working Group participants in the focus groups noted that they never received any emails from NDSA leadership upon joining. They suggested that the emails may have gone to the program contacts whom were university administrators, unlike to have the time to forward the email, or even know who to forward it to. Care must be taken to orient both the program contacts and the individual Working Group participants, so that those putting in WG effort are aware of the standard operating procedures for the virtual teams.

²⁴ Additional web content was added during September and October of 2013 that begins to address this.

finding a critical mass of people to spend some time on it.” One Co-Chair noted that members could send new project ideas to the listserv, instead of solely raising ideas on the calls. Another Co-Chair noted that the challenge is that people don’t necessarily volunteer themselves, although they are happy to take on the project if asked by the Library of Congress Co-Chair. To paraphrase the Co-Chair, ‘Often people want to help, but they don’t volunteer. If a Co-Chair suggests to someone that they take on a project, they often say yes. But, reading people’s interest in a project is hard to do on the phone.’ Multiple Co-Chairs agreed that they spend much of their time connecting people with tasks, or as one put it “herding cats.” Providing clear guidelines regarding how an initiative should move from discussion to work, and establishing concrete expectations of Working Group members could help relieve this pressure. If Working Group members explicitly committed to a particular amount of work per year—and if they tracked that work through a volunteer directory—Co-Chairs could refocus their energy on facilitating rather than pressuring volunteers to contribute.

3. Distributed Participation

Only 10% of Working Group respondents indicated that distributed WG participation was working well. Working group members may simply not know how to participate, beyond attending calls, as 17% of respondents did not perceive that they had tasks to work on beyond attending regular calls, and only 64% agreed with the statement “My role and responsibilities as a member of the working group are clear to me.” In Working Groups where conference calls are the primary mechanism for project team recruitment, there is an opportunity to complement the verbal ‘calls for help’ with a publically visible listing that can be accessed outside the calls, such as a wiki posting. Members may not know how to engage – especially if they miss (or tune out) the part of a call where help is requested. Also, as a member cautioned, to maximize benefit from the wikis, they should be easier to find and perhaps made public. As it stands, only members of the NDSA can access the wiki, which holds materials from all the Working Groups. Similarly, potential members cannot see the Working Groups’ histories, which primarily reside in the wikis. Three members shared their problems accessing these workspaces, due to lost passwords and wiki URLs.

4. Project Management

Only 44% of Working Group respondents agreed that project deadlines were “usually met” by participants; in a separate question, only half of the respondents agreed that projects move forward in a timely manner. When an individual is stalled and waiting, it is important to have a mechanism to openly address the reason and initiate a contingency plan, redirecting that person’s effort as needed. These data points reflect both a need for someone to play a project manager type role, and an opportunity for Working Groups to ensure that members understand and agree upon on their own standards of performance. Outreach and Content Working Groups are positioned to benefit the most from such interventions, as these groups were split between those who thought projects did or did not move forward in a timely manner.

In a volunteer-driven virtual collaboration environment, it is vital that Working Group participants realize that their time is valued. A series of survey questions asked respondents to rate their perceptions on how various entities valued their NDSA efforts. A majority of Working Group respondents felt that their NDSA Working Group efforts were valued by fellow

A majority of Working Group respondents felt that their NDSA Working Group efforts were valued by fellow members (64%), and Co-Chairs (67%).

members (64%), and Co-Chairs (67%). However, 59% were either unsure or neutral on whether the Secretariat valued their effort. A majority (62%) were also either unsure or neutral as to whether the digital preservation community at large valued the efforts. If a member joins the NDSA to support the national digital preservation effort or connect with the Library of Congress, such ambiguity may indicate a member who is unsure of whether their efforts are resulting in the desired impact.

PROJECT WORK

In the past six-month timeframe, 36% of Working Group respondents indicated that they assisted with the generation of “products” (i.e. case studies, web content, reports or other), while a quarter indicated that they “didn’t really participate” in the Working Group.

INCREASING WORKING GROUP ENGAGEMENT

Increasing the Working Group workforce was the most common theme from Working Group member responses on what could be improved in their group. A quarter of responses pointed to the idea of increasing the level of participation among members, while a fifth suggested increasing the number of active members. 15% suggested that they needed “more time”, which may indicate a need to increase efficiency. As one member explained, simply reallocating time from communication digest could help, “More free time would allow more participation. I have support from my institution to put the time in, but I just don’t have the time.”

Three types of membership engagement surfaced from our data:

- 1) Passive observers, including those invited to participate but for whom digital stewardship is topically peripheral to their daily work.
- 2) Low to mid-level participants, capable of contributing 10 hours a month or less. This category is the most common among responses, although it is perhaps the most difficult to manage in terms of task assignment and project development, thereby requiring human capital to manage their efforts as a whole to realize products.
- 3) High-level participants, with the capacity to contribute more than a dozen hours to the NDSA monthly. These individuals act as primary ghost authors and researchers, doing a bulk of the proverbial heavy lifting for initiatives such as the *National Agenda*, case studies, and the Digital Preservation in a box. This group also includes member-based NDSA leadership, such as the Working Group Co-Chairs.

Each member type requires a different level of guidance and support from Working Group Co-Chairs. Such engagement strategies should be developed and implemented across the NDSA Working Groups to encourage increased member engagement. For example, passive observers could be identified by the Working Group Co-Chairs and approached at a specified annual time by a designated NDSA representative (not a WG member), who could then check in with this group via email or a survey for suggestions and further information on how to integrate them into the NDSA’s ongoing work. Low to mid-level participants could be given small, straightforward tasks to complete, including reviews and copyediting of documentation produced by the Working Group. The high-level participant category could be used as a reward tier of engagement, providing incentives to members (visibility through annual awards to all who contribute a set number of hours, for example) to increase and recognize their participation. NDSA leadership has an opportunity to develop such plans and share them across Working Groups, to balance the realities of what members can contribute by leveraging tailored tasks uniquely suited to their level of participation.

Given that the majority of current NDSA members operate within *passive observer* or *low-to-mid level participation status*, Co-Chairs might benefit from establishing capacity development plans to serve as an accessible roadmap with recommended best practices on how to facilitate the progression of individuals up the chain of engagement. Increasing member capacity and/or increasing project management staffing would greatly improve productivity within the Alliance.

Other organizational demographics should be considered in developing such a plan. For example, the participation capacity for a representative of a small two-person nonprofit may differ greatly from a representative from a large corporate entity. However, in our focus groups, representatives from two such organizations agreed that more organization and precision in emails would help them digest information more quickly, thereby allowing them to contribute more project time instead of

information digestion time (on calls or reading/managing email). As the commercial representative summarized, “calendaring and communication is key.”

WORKING MEETINGS

The suggestion to include regular, in-person work sessions as part of the annual NDIIPP Digital Preservation meeting surfaced in multiple groups. As one member stated, “There is something about a meeting that changes the economics of time commitment. Because people who could have never made the case to work 10-12 hours on something...they will now spend that much time because they are in that meeting, in addition to prep.”

As one member mentioned, the benefit of coming together with fellow members for a working meeting is that, “you have a day or two where you are dedicated and accountable to the others in the room.” A member noted that a focused working meeting might re-engage individuals who no longer attend the conference, “If you focus on the objective of solving a problem - you could avoid people skipping because they feel they have already heard the updates at another venue.”

The need for in-person work time should not replace virtual collaboration, however it has a role in fostering efficient collaboration. As one member explains, relationships among collaborators rely on a social connection. “Developing a personal relationship where you know people is vital before you go on the phone call, and that requires face-to-face time.” Another member used the Hydra Project as an example, “the Hydra project is really great at that notion of bringing together coders to work on similar code-base. Tom Cramer, founder’s, philosophy is that face-time is really important because you get to know someone personally, and know somebody socially, and then you start to trust them. And that’s what collaboration is all about, being able to trust that if you partner with someone on a project, they’re going to pull their weight and come through for you.”

Regular in-person work sessions for each Working Group can enable these groups to plan their activities with this concentrated work-time in mind. Throughout the year, the Working Groups could each undertake a series of projects that contribute toward and culminate in these in-person working sessions. The face-to-face opportunity (and accountability) may also help to transform some of the low to mid-level participants into high-level participants as well, both by providing additional ways to get involved (planning and coordinating the meeting, as well as actually engaging in preservation work) and by deepening relationships between Working Group members.

Such in-person meetings have to be scheduled strategically, as many members noted they did not have travel budgets available to allow for additional trips. Another member noted that, “It’s good to see the same people at events, but I still need to be in the office,” indicating that there must be value for such meetings beyond networking. Regionally based NDSA meetings were suggested by focus group attendees as a solution to this problem. As many NDSA members already attend the NDIIPP Annual Meeting, this may provide another opportunity to promote concentrated, in-person work without incurring additional expense.

REGIONAL MEETINGS

Regional meetings were suggested in two of the focus groups as ways members would like to see more face-to-face interaction among the membership; the West Coast and North Carolina surfaced as regions that may have critical mass. Two focus group members discussed the recent New York regional meeting. One noted that it, “could have been moderated a bit more crisply; there were 70 people. But, more people got a look at what was going on than those usually on the phone calls.” Given the data, care should be taken to balance presentation and report-out with working sessions so that members have ample opportunities to work together and interact.

ACTIVITIES: RELATED OPPORTUNITIES

- Establish an email communications strategy that deliberately maximizes the amount of information communicated while minimizing the number of emails sent and the depth of content included.
- Formalize the WG structure so that there are concrete goals and deliverables, measurable according to a schedule. If work completes—or if it ceases to progress—disband the group in a formalized way.²⁵
- Consider broadening the range of WG tasks, marking some of those that are not primarily “preservation” in nature as opportunities for members with different strengths. For example, WG project management, meeting planning, or communication tasks may provide an opportunity for members with less direct preservation experience/knowledge to contribute meaningfully to the group’s work.
- Document clearly and consistently the channels through which an NDSA project may be started, expectations of WG projects, and what happens to the deliverables.
- Focus and/or align the work of the Working Groups clearly with the *National Agenda* to promote consistency and to scale activity.
- Consider building upon the regional meet-up model, encouraging sub-communities to form on a regional basis. These groups could pursue specific collaborations fostered through in-person meetings and deepened personal connections.
- Consider having explicit WG commitments to concrete tasks or an in-person working meeting (similar to “Camp” and Hackathon environments) that are undertaken in conjunction with each annual NDIIPP Digital Preservation meeting, which many NDSA members do attend. Not all Working Group members would need to be involved, but each WG could develop and/or progress toward a milestone or deliverable while gathered at the annual conference.
- Consider having WG members explicitly commit to a particular amount of work per year and then track that work through a volunteer directory. This could allow Co-Chairs to refocus their energy on facilitating rather than pressuring volunteers to contribute.

SECTION 5: RECOMMENDATIONS**A) OVERVIEW**

The NDSA’s early story as an emerging coalition is one of great success. In just over three years, this network organization has established strong ties between organizations representing a variety of sectors to address a common problem: capacity-building for the preservation of digital content nationwide. The NDSA includes substantial representation from each of its key, identified sectors—government agencies, educational institutions, non-profit organizations, and businesses. These member groups are actively cooperating to advance digital stewardship, through advocacy work, standards development, preservation guidelines and case studies, surveys, and the *National Agenda for Digital Stewardship*.

As the NDSA continues to mature, there are a number of things the leadership and management of the network will need to do in order to strengthen the health and viability of the NDSA. Our research findings suggest a range of lightweight adjustments that NDSA leadership and Working Group Co-Chairs can implement to improve the operational effectiveness of the NDSA, including 1) structural changes to address current communications and workflow challenges, and 2) developing new mechanisms to orient and support prospective and new members. These minor changes are described in brief throughout the “Findings” section of this informing document, and presented in summary in the 12-month phased, comprehensive-but-manageable Capacity Development Action Plan.

²⁵ This model is in use within the Internet Engineering Task Force and the Research Data Alliance.

However, our research findings also suggest that the NDSA currently is in transition from an “emerging coalition” to a “transitory federation”—a normal part of network growth. As this transformation takes place, NDSA administration/leadership will also need to evaluate and plan for the NDSA’s continued development. Of most concern in this change management work, as we describe below, is the organizational management structure supporting the Alliance today. We provide recommendations, contextualized in organizational management research findings from the past three decades.

B) LIGHTWEIGHT ADJUSTMENTS

Networks usually emerge to handle problems that are too comprehensive or widespread to be properly approached by any single organization. By form, networks identify and capitalize upon commonalities of mission across institutions (and often sectors) to enable their collaboration in a space marked by facilitation, not hierarchical leadership. Incentives to work within networks must serve to reinforce work contributed both by the individuals from constituent institutions, who bridge these network members’ activities and perform the work of the community in addition to their local duties, and also the organizations that these individuals represent, who contribute resources to the network (staffing, funding, etc.) in order to receive concrete benefits.

Networks are balancing acts, characterized by chameleon-like ability to blend and change and morph over time to suit the disparate needs of their constituent organizations and the larger communities that they serve. In order to promote growth, network managers and leaders must glue their members together and enable and facilitate their work effectively and efficiently.

For the NDSA, on the basis of our research, we recommend ways to simplify, streamline, and make more visible the contributions to and achievements by the NDSA. We also identify ways to cultivate a greater sense of individual commitment to the NDSA, turning passive engagement into kinetic energy that can fuel the activities of this Alliance.

The recommendations captured herein match those that were featured in each of the “Related Opportunities” subsections of the “Findings”, above. We describe these same opportunities as concrete activities that could be incorporated by the NDSA in the near term as resources allow. To foster implementation planning, proposed activities are charted out in the following year-long, quarterly phased Capacity Development Plan. Such activities could be undertaken by a combination of the Secretariat, Coordinating Committee, and Working Group Co-Chairs, in conjunction with members, to incrementally reform the organization for greater effectiveness. Note that these activities could also be stretched out over the full three-year membership term if this approach would be better suited to NDSA staff/volunteer effort levels.

Importantly, we suggest using the *National Agenda* as the core around which the Capacity Development Plan takes shape. We believe this *National Agenda* provides both structure and incentive that can help the NDSA gain clarity of mission, activities, and operational approaches in concrete ways.

NDSA CAPACITY DEVELOPMENT PLAN

The following proposed schedule encompasses all of the opportunities marked in this informing document. Recognizing that a small concentrated subset of the NDSA membership may be carrying out much of this work, we recommend that the timeframe represented here should be adapted to accommodate individual availability and organizational priority (i.e., it may be more feasible to conduct this work over a three-year term rather than the first year). To maintain accountability and engage the membership on progress, we recommend sharing the adapted plan with both the NDSA leadership (both Library of Congress based and non-NDIIPP), and the broader membership.

OBJECTIVES:

1. Improve and refine the NDSA's work by aligning activities with the *National Agenda*;
2. Increase engagement among the membership.

EVALUATION METRICS

The suggested changes herein are designed to impact the work of the NDSA, as measured on a number of metrics. The following measures should be tracked throughout implementation, and the next three-year term, to measure organizational success and adjust the NDSA's Capacity Development plan as needed.

- Member engagement
- Working group productivity, both perceived and actual
- NDSA productivity as a whole, both perceived and actual.

IMPLEMENTATION TEAM:

This plan proposes that a single individual play the coordinator function (e.g., Michelle Gallinger), in concert with NDSA membership representatives from the Coordinating Committee who function to inform and oversee plan implementation. This plan also anticipates high participation from NDSA Working Group Co-Chairs in completing specific portions of the work.

FIRST QUARTER (MONTHS 1-3)

Month 1

- Produce a statement for members regarding the NDSA's forthcoming work to streamline and focus its 2014-15 activities using the *National Agenda*. Host an open meeting to discuss implications and concerns.
- Assemble a change-management team, comprising representatives from the Secretariat, Coordinating Committee, and Working Groups. Review and refine the NDSA Capacity Development Plan, and appoint members of this change-management team to key roles that will help ensure the plan progresses.

Month 2

- Build a simple NDSA Working Group Project Form to standardize WG project proposal processes. Include simple, straightforward categories, e.g.: Project Title, Objectives, Deliverables, Contributors, Schedule, and Relationship to NDSA *National Agenda*. Determine where this documentation will "live". Share with all Working Group Co-Chairs, vet and edit as needed to ensure buy-in from all Working Groups.
- Issue a call for volunteers for several new roles within the NDSA: project managers (one for each Working Group), facilitators (one for each Working Group), and documentation reviewers (for the NDSA website and all Working Group publications). Project managers will serve as structuring agents and watchdogs on projects, helping each group to manage its efforts. Facilitators will promote and structure cross-group exchange. They will share notes from their own Working Group with other Working Group facilitators and report briefly back to their own Working Groups what all other Groups are doing.

Month 3

- Assign volunteer project managers and facilitators to Working Groups.
- Facilitators work with Co-Chairs to identify/author a brief charge for each Working Group.
- Project Managers and Co-Chairs briefly identify and describe ongoing and proposed projects.
- Co-Chairs synthesize their WG's Charge and Projects in a wiki-based document, and that link is sent to all Working Group members (along with username/password instructions) for review prior to every call.
- Facilitators and Co-Chairs host a WG conversation with their members to describe and discuss the proposed work and the Working Group's charge. Post-conversation, formalize each WG's charge via WG vote (hosted in a standard way). Co-Chairs work with the Document Reviewers to review and propose these materials for inclusion on Working Group pages of digitalpreservation.gov/ndsa.
- Refine orientation materials; clarify processes and procedures for integrating new members. Include concrete steps that document each stage from inquiry to integration. Publish prominently on the NDSA website, and produce a form email that includes that link to streamline the process for orientation.
- Update the list of member benefits (building from what is currently available on the website, in the 2011 Membership Packet/Principles of Collaboration, and in the Activities). Make a compelling statement that can be replicated across all member-facing materials (website, membership packet, and perhaps annual reports to Program Contacts, as described below). Solicit and record testimonies from key members in each sector and include these in the site.

SECOND QUARTER (MONTHS 4-6)

Month 4

- Project managers work with Co-Chairs and members to scope each project according to the NDSA Project Form. Highlight cross-sector opportunities and inputs, designate one core project per group for an in-person work session in conjunction with the 2014 Digital Preservation meeting.
- Documentation reviewers review project plans. If the Project Form is not working for particular projects and/or groups, the documentation reviewers can review and suggest edits.
- Formalize and launch projects (some necessarily underway already); highlight key initiatives on the website. Project managers begin shepherding the work forward as a managed process.
- Documentation reviewers ensure all formal roles are credited in visible ways on the NDSA website—NDSA Co-Chairs, Project Managers, Contributors, Facilitators, Documentation Reviewers (including institutional affiliations). This will begin to lay a foundation for rewarding higher levels of participation and identifying lower level participants for future interventions and check-ins.
- The Secretariat plans the first NDSA roundtable discussion and invites participation from each of the four key sectors (government, academic, non-profit, commercial). These exchanges can continue to build relationships between sector-based groups and recognition of NDSA as a place where cross-sector activities occur.

Month 5

- Facilitators host their first call to report in on all WG charges and Projects planned for 2014-15.
- Implement a general WG monthly conference call design and agenda. Include standard, monthly reports from Facilitators and Project Managers. Ensure these meetings are a clear blend of report-outs, proposals, and information exchange supporting the work of the Working Group.
- Set up a master 2014-15 Projects calendar using the schedules. Co-Chairs check in monthly with Project Managers, and the Secretariat representative checks in monthly with WG Co-Chairs to make sure progress is made. If work completes—or if it ceases to progress—table, project groups are tabled in a formal way.

- Evaluate the quantity/quality of emails sent out through the NDSA listservs. Develop brief guidelines for regular emails (a monthly digest or bi-monthly digest of WG activities and other ongoing matters), and appoint someone to coordinate these regular emails.

Month 6

- Identify high-level participants, using their documented contributions. Design a reward category or reward strategy that can coincide with the July NDIIPP Digital Preservation meeting.
- Formalize the design for in-person Working Group meetings for the annual NDIIPP Digital Preservation meeting. Secretariat requests short descriptions from each WG to include in the Program.
- Document in an Annual Report (to be shared at the NDIIPP Digital Preservation meeting) the following key components: 1) *National Agenda* and other published outcomes delivered in the previous year, 2) WG briefings, 3) Outreach accomplished in the previous year (road shows, member presentations, collaborations). Highlight core NDSA contributors. These Annual Reports will help Program Contacts stay current; they also provide a historical record of the NDSA's development and of member involvement.
- Evaluate progress to date with the change-management team. Make plans to report on progress at the annual conference.

THIRD QUARTER (MONTHS 7-9)

Month 7

- Host Working Group meetings with targeted outcomes for each Working Group at the NDIIPP annual conference.

Month 8

- Launch a call for volunteers, either in coordination with a Working Group (Outreach?) or from the NDSA Secretariat, to plan and implement a 2015 Membership Directory, charting member preservation activities. This can be populated through a simple annual survey. Ideally, it can be maintained as a database, and published bi-annually as a pdf. The Membership Directory group (whether NDSA-based or based within a Working Group) can take responsibility for editing and synthesizing this national Directory on behalf of the community. NDSA members can use the Directory to share basic information about each member's individual projects and Working Group initiatives to promote collaboration and to decrease duplication.
- Plan a series of conversations with the commercial members. Consider ways of building stronger corporate volunteerism channels within the NDSA through pro bono work from major companies (members or otherwise). Such a philanthropic approach to corporate volunteerism is utilized within large-scale nonprofits to provide service opportunities to industry-based staff. Research shows that such pro bono work is most successful when partnership parameters are scoped and bounded for mutual benefit. Inviting industry peers to assist with projects that are designed and implemented through NDSA to move our country toward its national strategy for digital stewardship could be framed accordingly.

Month 9

Issue a call for volunteers to continue building upon and formalizing the regional meet-up model. These groups could pursue specific collaborations fostered through in-person meetings and deepened personal connections.

FOURTH QUARTER (MONTHS 10-12)

Month 10

-
- Ensure all structures are now documented and implemented: Working Group call agendas, email communications plan, documented pathways for proposing and carrying out Working Group projects, Facilitators updates, Roundtable formats, Master Calendar and Project Management reporting, Orientation processes.
 - Evaluate work to date with Working Group Co-Chairs and with the Facilitators. Are the new structures improving work? Is there increased efficiency? Are there new “sore spots” that need to be evaluated and addressed?

Month 11

-
- Host a second “hot topic” roundtable; publish a related Signal blog.
 - Refine any components of the Capacity Building work that need additional attention at this time, as per Working Group Co-Chairs and Facilitators conversation in Month 10.
 - Pilot a “buddy” relationship that pairs commercial and non-commercial partners. This could start very small (2-3 pilots) and be created in conjunction with the pro bono activities. If successful, it could be scaled up to increase relationships and member benefits around cross-sector engagement.

Month 12

-
- Disseminate a brief 5 minute survey, to be delivered to all Working Group participants, evaluating the core changes: correspondence, website, call formats, project formats, and master calendar.
 - Evaluate results; continue tweaking components for optimal member performance and perception of member benefits.

These lightweight adjustments ultimately should help to reduce the work burden on individuals, increase the number of individuals involved in NDSA activities, and provide a structured workflow that the NDSA’s administrative leadership (e.g., Library of Congress staff) can use to manage ongoing activities in a more streamlined manner.

C) ORGANIZATIONAL TRANSFORMATIONS

Our second set of recommendations concern evaluating, documenting, and reinforcing the stability of the organizational apparatus supporting the NDSA. They build from a brief evaluation of network organization management research, as described below.

Networks are created with a specific logic in mind: some problems are simply too large or sprawling to fit realistically within the mission of a single organization. When such a problem arises, organizations are motivated to collaborate—either within or across industries—in order to address that common issue and make progress toward its effective management. These relationships are seldom hierarchical, and they depend upon the involved institutions’ agreement that the collaborative activities undertaken by the network are mutually beneficial to all participants.

In the absence of hierarchy, other forms of leadership and management must surface, be reinforced, and on occasion be fully reinvented in order to support and structure the work of a network. Usually, such re-architecting comes as a direct result of the shifting sea of organizations encompassed by the network. This is seldom a comfortable journey, and there usually are a range of options and opportunities to choose between when they occur. There is not one “magic formula” that a network manager can deploy to produce a healthy network. Instead, network managers (and indeed, invested leaders throughout a network) must be comfortable sorting through the many variables, making selections that are appropriate for today’s needs, and knowing that the re-evaluation process must remain ongoing and intentional.

NDSA's current organizational structure marries two network governance models: lead organization and network administrative organization. There are pros and cons to the current structure at this moment in time due to variables that could not have been anticipated at the founding in 2010.

On the positive side, the Library of Congress provides valuable services that support many core aspects of the NDSA's work. Officially, the Library of Congress functions as the Secretariat of the organization. In this capacity, the Library of Congress provides a considerable amount of infrastructure and support to facilitate the work of the Alliance, and it provides the technical platforms necessary to coordinate communications between members (listservs, website, wikis, etc). The Library of Congress also provides a key sense of authority and importance to the endeavor by association. Finally, it provides administrative and financial support to plan and host in-person NDSA Working Group opportunities at the annual NDIIPP meeting.

However, the Library of Congress's support creates a dependent relationship between the NDSA community and the Library that is not well understood by the NDSA's membership. Survey respondents and focus group participants reported the high value of the relationship (largely focusing on the name-recognition value that the Library of Congress brings to the NDSA's endeavors). They also report frustration in understanding the hierarchy within which NDSA operates currently. Because these relationships (NDSA to NDIIPP, NDSA to LC, NDIIPP to LC) are not well documented, they raise questions, concerns, and misunderstandings.

As Robert Axelrod ("The Evolution of Cooperation", 1984) noted famously the "shadow of the future" is lengthened by trust and reciprocity between cooperating agents. Institutions join networks, not usually out of altruistic intent, but as a consequence of the pursuit of their own best interests. Cooperation between these groups emerges because these agents experiment, accomplish something together, and then try again. Over time, the cooperating groups each begin to trust that reciprocity is a social norm of the emerging network. So in a healthy cooperative network, members contribute because they know other members will likewise contribute and because they know that the outcomes of those contributions will benefit their local aims, missions, and goals. The greater that trust, the more invested the players become. But if that trust is not strong, members will hold back or refuse to commit. NDSA leadership needs to evaluate the impact that may result from the lack of trust some players in the community feel regarding the stability of the Library of Congress's unofficial and undocumented roles.

As NDIIPP leadership has changed over the past year due to retirements and other exigencies, additional questions must be raised and grappled with concerning the ongoing stability of the NDSA due to the dependencies inherent to this relationship today. The leadership changes in the lead organization could yield a crisis in the NDSA with little forewarning. We recommend as a first step that NDIIPP and NDSA work together to document an exit strategy and transition plan for the NDSA. This is a normal (indeed, expected) piece of documentation for network organizations, and would provide a roadmap that the NDSA could use if changes ahead unexpectedly upset the balance that currently enables the Library's support of the NDSA. We also recommend that the NDSA establish contingency plans for a range of circumstances that could compromise the network, its products, and its communications apparatus.

NDSA is poised for continued growth and expansion over the next charter period. These recommendations are intended to enhance its progress and help to reinforce the network's stability and sustainability in the future.

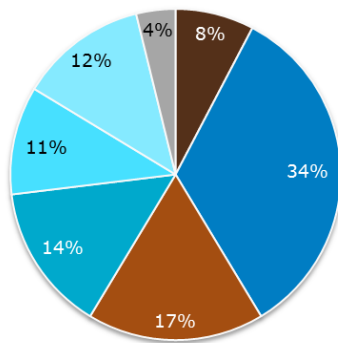
SECTION 6: APPENDICES

APPENDIX A: SECTOR REPRESENTATION ON WORKING GROUP LISTSERVS

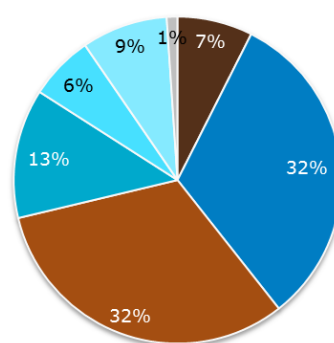
Sector representation was coded based on the email domains of Working Group listserv participants as of May 2013.

Organizational Sector	Domain Indicator
Commercial	.COM domain
Education	.EDU domain
Nonprofit	.ORG domain
Library of Congress	LOC.GOV domain
Federal Government	AGENCY.GOV domain
State Government	STATE.GOV domain
Other	Other domain

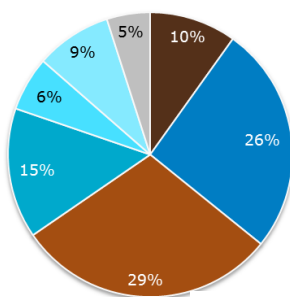
Content WG Listserv - 104 Participants



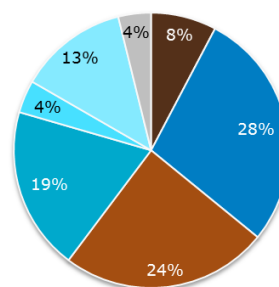
Infrastructure WG Listserv - 94 Participants



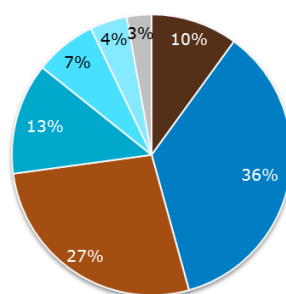
Innovation WG Listserv - 81 Participants



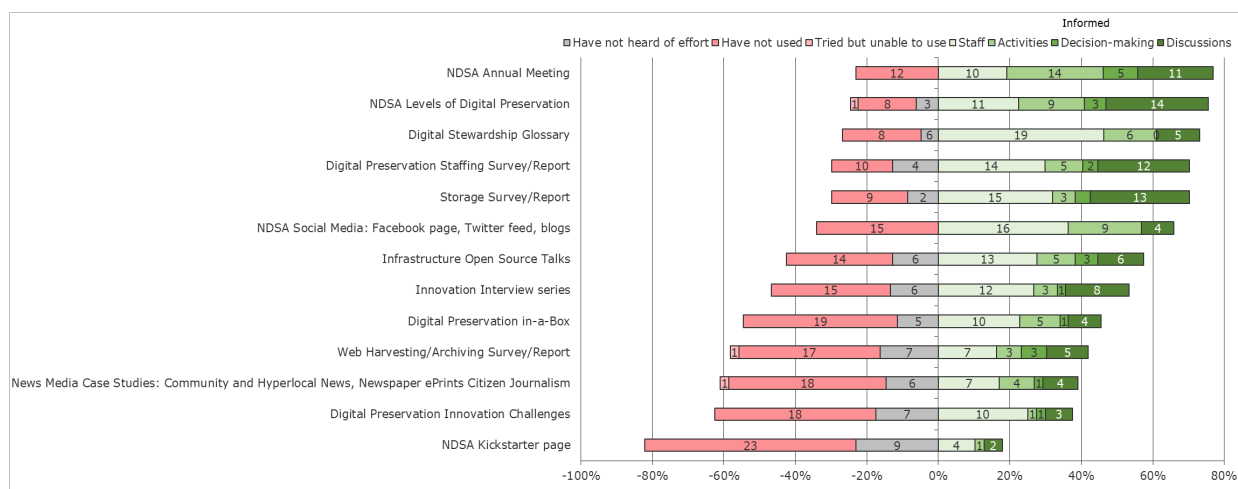
Outreach WG Listserv - 78 Participants



Standards WG Listserv - 70 Participants



APPENDIX B: SURVEY RESPONDENT USAGE OF NDSA OUTPUTS



APPENDIX C: NDSA PROGRAM CONTACT SURVEY INSTRUMENT

**National Digital Stewardship Alliance (NDSA)
Program Representative****Survey Introduction**

The Educopia Institute is engaged in a one-year research project with the Library of Congress to both assess the NDSA's impact and value, and identify ways to strengthen the Alliance and the community it supports.

As a core component of this research, baseline data is requested from each NDSA member institution through two surveys:

1. a survey to be completed by each member institution's primary NDSA Program Representative and
2. a survey to be completed by each NDSA Working Group member.

We ask that you fill out this Program Representative survey as the NDSA currently has you on record as your institution's primary NDSA Program Representative. If you are not your institution's primary NDSA contact, please close this survey and send the contact's information to katherine@educopia.org.

The purpose of this survey is to assess the impact and value of the NDSA for its member organizations. Input from all NDSA members will help the research team to fully understand the way that the Alliance has functioned to date and the opportunities that exist for its future. Survey findings will be supplemented by in-person focus groups conducted by Educopia later this year. Results will be aggregated and shared in a report later this year. Personal identifying information will not be included.

Please plan on taking 30 minutes to complete this survey.

If you need to stop and resume the survey at another time, SurveyMonkey can save your responses for completed pages (note: cookies settings must be enabled on your machine and be stored between browser sessions for this to work). If you elect to do this, you must return to the same computer and browser to complete your survey in order to access your previous answers.

If you do not personally know the answer to a question, please mark "do not know" or "unsure", as opposed to requesting the information from your staff.

We appreciate your time and value your honest feedback.

- The Educopia Institute

National Digital Stewardship Alliance (NDSA)
Program Representative

Respondent Demographics

Please tell us about yourself.

1. What is your age range?

2. What is your gender?

3. What other groups, if any, do you personally participate in to inform your long-term digital efforts (including preservation, curation, and/or archiving)?

Select all that apply.

- ☐ Association of College and Research Libraries (ACRL)
- ☐ Association of Computing Machinery (ACM)
- ☐ American Library Association (ALA)
- ☐ Association of Research Libraries (ARL)
- ☐ Chief Officers of State Library Agencies (COSLA)
- ☐ Coalition for Networked Information (CNI)
- ☐ Council on Library and Information Resources (CLIR)
- ☐ Council of State Archivists (CoSA)
- ☐ Digital Library Federation (DLF)
- ☐ Educause
- ☐ IEEE
- ☐ International Federation of Library Associations and Institutions (IFLA)
- ☐ International Internet Preservation Coalition (IIPC)
- ☐ Internet 2 / Internet2 Muse
- ☐ National Association of Government Archives and Records Administrators (NAGARA)
- ☐ National Association of State Chief Information Officers (NASCIO)
- ☐ National Association of State Technology Directors (NASTD)
- ☐ Nonprofit Technology Enterprise Network (NTEN)
- ☐ Research Data Alliance (RDA)
- ☐ Society of American Archivists (SAA)
- ☐ TechAmerica

Page 2

National Digital Stewardship Alliance (NDSA)
Program Representative

☐ Other (please specify)

**National Digital Stewardship Alliance (NDSA)
Program Representative****Organizational Demographics**

Tell us about the organization that you represent in the NDSA.

***4. Which sector best describes your organization?**

***5. Which organization type best describes your organizational unit?**

- ☐ Vendor
- ☐ Library
- ☐ Research institute/center
- ☐ Museum
- ☐ News / Media organization
- ☐ Consortium
- ☐ Archive
- ☐ Professional association
- ☐ Performing Arts organization
- ☐ Other (please specify)

***6. Where are your organization's employees primarily located?**

***7. Where are your organization's primary customers/constituents/members located?**

8. How does your organization primarily interact with its customers/constituents/members?

- ☐ In-person, at a physical location
- ☐ Via the Internet
- ☐ Other medium (please specify)

**National Digital Stewardship Alliance (NDSA)
Program Representative****Digital Asset Demographics**

Tell us about your own organization's digital assets.

9. What type(s) of digital assets are currently under your organization's curatorial responsibility?

Select all that apply.

- ☐ Research data
- ☐ Document files (including publications, electronic theses and dissertations)
- ☐ Video
- ☐ Databases
- ☐ Audio
- ☐ Web page files
- ☐ Images
- ☐ Software files
- ☐ Don't know
- ☐ N/A – My organization does not maintain either a digital archive or a digital collection.
- ☐ Other (please specify)

10. What is the approximate combined size of your organization's digital collection(s) and/or archive(s)?**11. Approximately, how much does your organization spend annually on digital preservation activities (including staffing)?****12. How many FTE in your organization are devoted to digital preservation and archiving?**

**National Digital Stewardship Alliance (NDSA)
Program Representative****NDSA Overall**

***13. Approximately how much time does your organization devote to NDSA activities monthly?**

***14. In your own words, what is the mission/purpose of the NDSA?**

15. In a few words, why did your organization join the NDSA?

***16. What, if any, activities and/or opportunities does NDSA participation offer that are not available through any other initiative or organization?**

Please list.

**National Digital Stewardship Alliance (NDSA)
Program Representative****NDSA Working Groups**

***17. In which NDSA Working Groups and/or committees do you and/or your organizational representatives participate?**

Select all that apply.

- ☐ Standards & Practices
- ☐ Outreach
- ☐ Innovation
- ☐ Content
- ☐ Coordinating Committee
- ☐ Infrastructure
- ☐ Don't know

***18. How do your organizational representatives participate in NDSA Working Groups?**

Select all that apply.

- ☐ Attend in-person meetings
- ☐ Join conference calls
- ☐ Act as Co-chair
- ☐ Assist with generation of materials/content/reports
- ☐ Don't know
- ☐ Other (please specify)

***19. What do you expect from your organization's NDSA Working Group involvement?**

National Digital Stewardship Alliance (NDSA)
Program Representative

NDSA Overall

***20. List any NDSA activities that seem to duplicate those hosted by other organizations.**

***21. Rate the NDSA's overall impact on:**

	Very positive	Positive	Neutral	Negative	Very negative	Don't know
Fostering collaboration among diverse communities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Raising public awareness of the need for active stewardship of digital resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advocating standards for the stewardship of digital objects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fostering cooperation between governmental, educational, non-profit, and commercial entities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promoting innovation in the areas of digital preservation and stewardship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating sustainable infrastructures for the preservation of digital content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building a community of practice around the management of distributed digital collections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. What, if any, digital preservation needs does your organization have which are not filled by the NDSA or other organizations?

National Digital Stewardship Alliance (NDSA)
Program Representative

NDSA Overall

***23. The NDSA accomplishes its work primarily through its Working Groups and Coordinating Committee. Do you believe NDSA should be modified to offer any of the following?**

	Yes	No	Unsure
Additional working groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working group team building activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint system/tool/IT development projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training on collaboration technology tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased formal collaborations with other digital stewardship initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More training/workshops/professional development opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A more formal committee structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Are there ways in which the NDSA's activities should be expanded outward, within broader communities? (e.g. technical, curation, archiving, storage, policy, standards) If so, what are they?

☐ No

☐ Yes (please specify)

25. Have specific entities/communities/voices been missing from your NDSA conversations to date?

If so, please identify.

☐ No

☐ Yes (please specify)

National Digital Stewardship Alliance (NDSA)
Program Representative

NDSA Value

***26. To your knowledge, how has your organization used the following NDSA-affiliated efforts/activities/products to inform activities in your own organization?**

Select all that apply.

	Informed our discussions	Informed our decision- making	Informed our activities	Informed staff	Tried but were unable to use	Have not used	This is the first I've heard of this effort	Don't know
NDSA Annual Meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Social Media: Facebook page, Twitter feed, blogs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News Media Case Studies: Community and Hyperlocal News, Newspaper ePrints Citizen Journalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Stewardship Glossary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation in-a-Box	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation Interview series	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrastructure Open Source Talks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation Innovation Challenges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Levels of Digital Preservation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Kickstarter page	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation Staffing Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Web Harvesting/Archiving Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***27. How valuable are the following to your organization?**

	Strongly valued	Valued	Neutral	Not valued	Strongly not valued
Your organization's membership in the NDSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affiliation with the Library of Congress through the NDSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The existence of a national alliance dedicated to digital stewardship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your organization's presence at the annual NDSA meeting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participation in NDSA working groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

National Digital Stewardship Alliance (NDSA)
Program Representative

NDSA Value

***28. Are there reasons not listed above as to why NDSA membership is important to your organization?**

If so, what are they?

☐ No

☐ Yes (please specify)

***29. How do you assess your degree of organizational participation within the NDSA?**

***30. How have the following preservation/stewardship activities in your organization changed as a result of your NDSA membership?**

	Greatly increased	Increased	No change	Decreased	Greatly decreased	Don't know
Intramural funding (within your organization)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to Library of Congress staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborations with organizations unlike your own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to federal funding agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visibility for your organization within leading preservation organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of your own institutional projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Operational efficiency within your organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of new digital preservation ideas, tools, or techniques	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
External (public or private) funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledge of digital stewardship best practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publicity for your institutional projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of innovative local projects/practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborations with organizations similar to your own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. How many multi-institutional collaborative projects initiated as a direct result of your organization's participation in the NDSA working groups?

Number of collaborative projects:

**National Digital Stewardship Alliance (NDSA)
Program Representative**

32. If NDSA participation has led to or facilitated collaborations for your organization (outside of Working Group activities), what is the context of the collaboration(s)?

Select all that apply.

- ☐ Grant proposal(s)
- ☐ Grant award(s)
- ☐ Shared products or services
- ☐ Collaborative development
- ☐ Information sharing
- ☐ Other (please specify)

APPENDIX D: NDSA WORKING GROUP PARTICIPANT SURVEY INSTRUMENT

**National Digital Stewardship Alliance (NDSA)
Working Group****Survey Introduction**

The Educopia Institute is engaged in a one-year research project with the Library of Congress to assess the NDSA's impact and value and identify ways to continue to strengthen the Alliance and the community it supports. Input from all NDSA members will help the research team to fully understand the way that the Alliance has functioned to date and the opportunities that exist for its future.

As a core component of this research, baseline data is requested from each NDSA member organization through two surveys:

1. a survey to be completed by each member institution's NDSA Program Contact and
2. a survey to be completed by each person participating in an NDSA Working Group.

You are receiving this survey in your capacity as a participant in one or more NDSA Working Groups. The purpose of this Working Group member survey is to assess the impact, value, and operations of the NDSA working groups.

Survey findings will be supplemented by in-person focus groups conducted by Educopia later this year. Results will be aggregated and shared in a report later this year. Personal identifying information will not be included.

Please plan on taking 35 minutes to complete this survey.

If you need to stop and resume the survey at another time, SurveyMonkey can save your responses for completed pages (note: cookies settings must be enabled on your machine and be stored between browser sessions for this to work). If you elect to do this, you must return to the same computer and browser to complete your survey in order to access your previous answers.

If you do not personally know the answer to a question, please mark "do not know" or "unsure", as opposed to requesting the information from your staff.

We appreciate your time and value your honest feedback.

- The Educopia Institute

**National Digital Stewardship Alliance (NDSA)
Working Group****Respondent Demographics**

Please tell us about yourself.

1. What is your age range?**2. What is your gender?*****3. What type of position do you hold at your institution?**

Select all that apply.

- ☐ Archivist
- ☐ Curator
- ☐ Librarian
- ☐ Faculty
- ☐ IT Professional
- ☐ Assistant Director
- ☐ Director
- ☐ Manager
- ☐ Senior Administrator
- ☐ CIO
- ☐ CEO
- ☐ Executive Director

Other (please specify)

**National Digital Stewardship Alliance (NDSA)
Working Group****4. What other groups, if any, do you personally participate in to inform your long-term digital efforts (including preservation, curation, and/or archiving)?****Select all that apply.**

- ☐ TechAmerica
- ☐ Society of American Archivists (SAA)
- ☐ Research Data Alliance (RDA)
- ☐ Nonprofit Technology Enterprise Network (NTEN)
- ☐ National Association of State Technology Directors (NASTD)
- ☐ National Association of State Chief Information Officers (NASCIO)
- ☐ National Association of Government Archives and Records Administrators (NAGARA)
- ☐ Internet 2 / Internet2 Muse
- ☐ International Internet Preservation Coalition (IIPC)
- ☐ International Federation of Library Associations and Institutions (IFLA)
- ☐ IEEE
- ☐ Educause
- ☐ Digital Library Federation (DLF)
- ☐ Council of State Archivists (CoSA)
- ☐ Council on Library and Information Resources (CLIR)
- ☐ Coalition for Networked Information (CNI)
- ☐ Chief Officers of State Library Agencies (COSLA)
- ☐ Association of Research Libraries (ARL)
- ☐ American Library Association (ALA)
- ☐ Association of Computing Machinery (ACM)
- ☐ Association of College and Research Libraries (ACRL)
- ☐ Other (please specify)

**National Digital Stewardship Alliance (NDSA)
Working Group****Organizational Demographics**

Tell us about the organization that you represent in the NDSA.

***5. Which sector best describes your organization?**

***6. Which organization type best describes the organizational unit you primarily represent?**

- ☐ Research institute / center
- ☐ Library
- ☐ Vendor
- ☐ Professional association
- ☐ Consortium
- ☐ Museum
- ☐ Archive
- ☐ Performing Arts organization
- ☐ News / Media organization
- ☐ Other (please specify)

***7. Where are your organization's primary customers/constituents/members located?**

**National Digital Stewardship Alliance (NDSA)
Working Group****Organizational Demographics**

Tell us about the organization that you represent in the NDSA.

***8. How does your organization primarily interact with its customers/constituents/members?**

☐ In-person, at a physical location

☐ Via the Internet

☐ Other (please specify)

9. Where are your organization's employees primarily located?*10. What type(s) of digital assets are currently under your organization's curatorial responsibility?**

Select all that apply.

☐ N/A – My organization does not maintain either a digital archive or a digital collection.

☐ Video

☐ Audio

☐ Images

☐ Document files (including publications, electronic theses and dissertations)

☐ Research data

☐ Web page files

☐ Software files

☐ Databases

☐ Don't know

☐ Other (please specify)

National Digital Stewardship Alliance (NDSA)
Working Group

NDSA Working Groups Overall

Tell us about your participation in an NDSA working group(s)

11. In a few words, why did you join the NDSA working group(s)?

*12. How much do you feel your work within the NDSA working group(s) is valued:

	Strongly valued	Valued	Neutral	Not valued	Strongly not valued	Unsure
By the digital preservation community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By fellow working group members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By the Secretariat/Library of Congress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By the working group co-chair(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*13. Over this past month, approximately how many hours did you spend on all NDSA working group activities?

Include time spent in meetings, following email, working on projects, etc. across all working groups.

Please enter time in hours, rounded to the nearest hour.

Hours spent on working groups activities in the past month:

**National Digital Stewardship Alliance (NDSA)
Working Group****Project Participation**

***14. Over the past year, approximately how many hours did you spend contributing specifically to working group projects (e.g. research, case studies, reports)?**

Include project related meetings, email, research, etc.

Please enter time in hours, rounded to the nearest hour.

If you did not contribute to a project, enter 0.

Hours over past year spent contributing to working group projects:

**National Digital Stewardship Alliance (NDSA)
Working Group****NDSA Working Group Participation**

Tell us about your participation in an NDSA working group(s)

*** 15. Do you participate in more than one NDSA working group?**

☐ Yes

☐ No

**National Digital Stewardship Alliance (NDSA)
Working Group****NDSA Working Group Participation**

16. Select all of the NDSA Working Groups and/or committees that you participate in.

- ☐ Standards & Practices
- ☐ Coordinating Committee
- ☐ Content
- ☐ Infrastructure
- ☐ Innovation
- ☐ Outreach

17. In a few words, why are you involved in more than one working group?

National Digital Stewardship Alliance (NDSA)
Working Group

Your Primary NDSA Working Group

For the working group you participate in the most, please consider the following questions.

***18. Select the working group that you participate in the most.**

- ☐ Infrastructure
- ☐ Innovation
- ☐ Content
- ☐ Outreach
- ☐ Coordinating Committee
- ☐ Standards & Practices
- ☐ Don't know
- ☐ Other (please specify)

***19. How long have you been a member of this working group?**

***20. In the last six months, how have you participated in this working group?**

Select all that apply.

- ☐ Attended in-person meetings
- ☐ Contributed to in-person meetings
- ☐ Listened in to conference calls
- ☐ Contributed to conference calls
- ☐ Co-chaired working group
- ☐ Assisted with generation of working group products (e.g. case studies, web content, reports)
- ☐ I am a working group member but I didn't really participate
- ☐ Don't know
- ☐ Other (please specify)

21. On a scale from 1-5, how engaged is the average member of this working group in the group's activities, understanding that individuals will vary?

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**National Digital Stewardship Alliance (NDSA)
Working Group**

***22. Do you think this working group is working on the most important issues relevant to the charge of the working group?**

☐ Yes

☐ No

☐ Unsure

☐ Other (please specify)

**National Digital Stewardship Alliance (NDSA)
Working Group****Your Primary NDSA Working Group**

Please continue answering questions for the working group you participate in the most.

23. Beyond the working group's current activities, what should it be working on?***24. How are decisions made within the working group?**

Select all that apply.

- ☐ Top-down
- ☐ Consensus
- ☐ Majority vote
- ☐ Don't know
- ☐ Other (please specify)

***25. How would you rate the level of collegiality in this working group?**

National Digital Stewardship Alliance (NDSA)
Working Group

Your Primary NDSA Working Group

Please continue answering questions for the working group you participate in the most.

***26. How much do you agree with the following statements?**

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Unsure
I am professionally satisfied with what has resulted from my working group's efforts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have tasks to deliver on for the working group, beyond attending regular calls/meetings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decisions in the working group are made in a satisfactory way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fellow working group members respond in a timely manner to emails.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participants in the working group have a shared understanding of the working group's goals and tasks.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This working group is as flexible as it needs to be to adapt to new information, tasks, or goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conflicts are resolved effectively and in a timely manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The diversity of expertise in the working group is ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deadlines on tasks are usually met by most participants.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Those that I work with the most closely in the working group, I also collaborate with outside of the NDSA.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My role and responsibilities as a member of the working group are clear to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work as a working group member is valued by my home organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Projects move forward in a timely manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**National Digital Stewardship Alliance (NDSA)
Working Group****Your Primary NDSA Working Group**

Please continue answering questions for the working group you participate in the most.

***27. When you joined this working group, how many of the people on it did you know already?**

- ☐ I knew none of the working group members
- ☐ I hardly knew any of the working group members
- ☐ I already knew some of the working group members
- ☐ I already knew most of the working group members
- ☐ I already knew all of the working group members

28. What works well within your working group?

29. What could be improved within your working group?

National Digital Stewardship Alliance (NDSA)
Working Group

Your Primary NDSA Working Group: Technology Use

*30. How should the following communication tools be used by this working group?

	Use more	Stay at current usage	Neutral / No opinion	Use less	Do not use
Online polling tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blog(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instant messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Video Conferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Audio/Phone Conferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online project management software	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shared online file and/or document storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Texting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wiki(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LinkedIn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twitter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

National Digital Stewardship Alliance (NDSA)
Working Group

NDSA Overall

***31. What, if any, digital preservation needs does your organization have which are not filled by the NDSA or other organizations?**

***32. Do you believe the NDSA should be modified to offer any of the following?**

	Yes	No	Unsure
More training/workshops/professional development opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working group team building activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training on collaboration technology tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A more formal committee structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joint system/tool/IT development projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional working groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased formal collaborations with other digital stewardship initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***33. Are there ways in which the NDSA's activities should be expanded outward, within broader communities? (e.g. technical, curation, archiving, storage, policy, standards) If so, what are they?**

☐ No

☐ Yes (please specify)

***34. Have specific entities/communities/voices been missing from your NDSA conversations to date? If so, please identify.**

☐ No

☐ Yes (please specify)

National Digital Stewardship Alliance (NDSA)
Working Group

NDSA Overall

*35. How valuable are the following to you professionally?

	Strongly valued	Valued	Neutral	Not valued	Strongly not valued
Affiliation with the Library of Congress through the NDSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The existence of a national alliance dedicated to digital stewardship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your organization's membership in the NDSA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your presence at the annual NDSA meeting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your participation in NDSA working groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*36. Are there reasons not listed above as to why your organization's NDSA membership is important to you personally? If so, what are they?

☐ No

☐ Yes (please specify)

*37. How much do you agree with the following statements?

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Unsure
I gain valuable professional knowledge from my NDSA working group involvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My network of international digital preservation professionals has increased through my NDSA involvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My collaborative projects have gained more attention due to the NDSA.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in multi-institution collaborations increased due to my NDSA activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working group products (e.g. case studies, reports) have helped me in my day-to-day professional work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My network of US-based digital preservation professionals has increased through my NDSA involvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

National Digital Stewardship Alliance (NDSA)
Working Group

NDSA Overall

***38. How many multi-institutional collaborative projects have initiated as a direct result of your participation in the NDSA working groups?**

Enter numbers only. If none, enter 0.

Number of collaborative projects initiated:

***39. To your knowledge, how has your organization used the following NDSA-affiliated efforts/activities/products to inform activities in your own organization?**

Select all that apply.

	Informed our discussions	Informed our decision- making	Informed our activities	Informed staff	Tried but were unable to use	Have not used	This is the first I've heard of this effort	Don't know
NDSA Annual Meeting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Social Media: Facebook page, Twitter feed, blogs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News Media Case Studies: Community and Hyperlocal News, Newspaper ePrints Citizen Journalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Stewardship Glossary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation in-a-Box	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Levels of Digital Preservation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation Interview series	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrastructure Open Source Talks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation Innovation Challenges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDSA Kickstarter page	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infrastructure Storage Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Web Archiving Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital Preservation Staffing Survey/Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E: STRUCTURED FOCUS GROUP QUESTION SET

Pre-Focus Group Write-in Questions:

(Attendees answer while waiting to start. Give each a color matching marker and stickers upon entry)

- In 5 words or less, describe your organization. - chart response
- How long have you personally participated in the NDSA? - sticker poll
Options: Under 1 year, 1-2 years, 2-3 years.
- Which working groups are you a member of? - sticker poll
Options: all WG names
- What is your current level of activity within the NDSA? - sticker poll
Options: 0 Inactive > 5 Very active (on a number line)
- How do you stay informed of NDSA activities? - sticker poll
Starter options: Emails, listserv, website, conference calls

Topic: NDSA Participation

1. What would encourage or allow you or your organization to participate more in the NDSA?
2. Are there any specific barriers to engagement?

Topic: Working Groups

New Project initiation

3. How easy is it to start a project/initiative within the NDSA?
4. What is the process to start one, say if you have an idea?
5. Could anything be done to help you through this process?

Task assignment

6. How do individuals take on tasks within your working group?
7. Could anything be done to improve this process?

Productivity

8. Do you feel that your working group is productive?
9. Is there anything else that would enable you to contribute more effectively to the working group?

Activities

10. Do the things that are created by the working groups meet your expectations?
11. Could anything be improved?
12. What, if anything, could enable working groups to accomplish more of value to you?

Topic: Collaboration

13. What could the NDSA do to help your own organization collaborate with others?
14. What organizations host similar activities to the NDSA? (KS/CD fill in on paper)
15. Is there overlap between the NDSA and other organizations?
16. What could the NDSA do to foster cross-sector activities?

Topic: Wrap up

17. Do you have any other comments you'd like us to share or discuss?

SECTION 7: BIBLIOGRAPHY

- Akkerman A. & Torenvlied R. (2011). "Managing The Environment: Effects of network ambition on agency performance." *Public Management Review*. 13(1): 159 – 174.
- Bass, Bernard M. and Bruce J. Avolio Eds. (1994) *Improving Organizational Effectiveness Through Transformational Leadership*. (California: Sage Publications).
- D'Aunno, T. A. and H. S. Zuckerman (1987). "The Emergence of Hospital Federations: An integration of perspectives from Organizational Theory." *Medical Care Review* 44(2): 323-343.
- Heranz J.H. (2010). "Multilevel Performance Indicators for Multisectoral Networks and Management." *The American Review of Public Administration*, 40(4): 445-460.
- Kenis P., Provan K.G. (2009). "Towards an Exogenous Theory of Public Network Performance." *Public Administration*. 87(3): 440-456.
- Provan, K.G. and H.B. Milward. (1995) "A Preliminary Theory of Interorganizational Network Effectiveness: A comparative study of four community mental health systems." *Administrative Science Quarterly*. 40: 1-13.
- Provan K.G., Veazie M.A., Staten L. K. & Teufel-Shone, N.I. (2005). "The Use of Network Analysis to Strengthen Community Partnerships." *Public Administration Review*, 65: 603–613.
- Provan K.G., Fish A.C., Sydow J. (2007). "Interorganizational Networks at the Network Level: A review of the empirical literature on whole networks." *Journal of Management*. 33:479–516.
- Milward, H.B. and Provan, K.G. (2006). "A Manager's Guide to Choosing and Using Collaborative Networks." *Networks and Partnerships Series*. IBM Center for The Business of Government.